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ACTIVITIES REPORT
REGISTRY OF TUMORS IN LOWER ANIMALS

1965 - 1973

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MAILING ADDRESS:

REGISTRY OF TUMORS IN LOWER ANIMALS
NATIONAL MUSEUM OF NATURAL HISTORY
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ESTABLISHMENT, OBJECTIVES, AND OPERATION

The Registry of Tumors in Lower Animals was begun in 1965 as a cooperative project between the National Cancer Institute (Contract No. N01-CB-33874) and the Smithsonian Institution to study tumors in invertebrate and poikilothermic vertebrate animals. Objectives are: (1) to collect, identify, characterize, and preserve specimens with neoplasms and related disorders from natural habitats, zoos, aquaria, and laboratory experiments; (2) to conduct and promote experimental studies of the nature, incidence, and etiology of these diseases; and, (3) to analyze, correlate, and disseminate pertinent published and unpublished information. As a result of such efforts, a number of benefits may accrue:

1. An improved understanding of the biology of cancer as it occurs at various levels of phylogeny.
2. Evidence concerning the question of whether certain animals may be exempt from cancer, and if so, why.
3. Evidence that may lead to discovery of new etiologic agents in cancer.
4. Evidence of carcinogens in the environment.
5. Evidence that may bear on certain theories of cancer: e.g., the oncogene theory, the clonal selection theory, the somatic mutation theory, and others.
6. Discovery of types of animals that may be useful in cancer research because of specific features such as differences in immunological complexity, unusual sensitivity or resistance to carcinogens, ability to concentrate certain elements, such as Hg, Cu, or Zn, genetic features influencing cancer rates, ability to reject tumors by autectomy, and so on.
7. Discovery of possible reservoirs or vectors of oncogenic viruses.
8. Identification and protection of populations in possible jeopardy from epizootic neoplasia.
9. Maintenance of a proper perspective among citizens concerned about the significance of reports of cancer among lower animals of economic importance.

After specimens with cryptogenic and induced lesions are received they are photographed, studied grossly and microscopically and stored for easy retrieval. An effort is made to determine the nature of the lesion or verify the diagnosis of the contributor, often after getting the opinion of one or more specialists for the type of animal or tissue involved. When specimens are received which appear to be good research models for furthering the understanding of neoplastic processes, research projects may be initiated by the Registry with the consent of the contributor.

PHYSICAL PLANT

Laboratory, storage, and office space occupies three rooms in the National Museum of Natural History, Smithsonian Institution, Tenth and Constitution Avenue, Northwest, Washington, D.C. In addition, the Registry has use of electron microscope, darkroom, and aquarium facilities. Library and duplication services are also available.

INFORMATION CONCERNING THIS REPORT

This report is cumulative for all accessions in the Registry's collection as of 5 December 1973. It supersedes earlier reports in that most cases previously listed as pending now have diagnoses and some cases have been reinterpreted following additional study. As a new feature, pertinent references are given for those accessions that have been specifically described in the literature or that exemplify a type of disease that has been the subject of a series of papers.

Additional information concerning selected unpublished cases can be made available on request. Persons interested in the comparative study of slides in the collection may either visit the Registry or request duplicate slides on short-term loan. Slides do not circulate from accessions that do not contain duplicate material; those that contain rare and irreplaceable material; and accessions that are being worked up for publication by the contributor. Anyone desiring to publish photographs from such comparative studies is expected to obtain permission from the contributor. Twenty sets of 20 slides each are available as instructional aides.

This report is being distributed to all contributors whose address is still known and to other persons who have expressed an interest in the work of the Registry and/or tumors in lower animals. It is also being sent to selected persons known to be studying diseases in various cold-blooded vertebrates and invertebrates for their possible interest in this peripheral field. Approximately 2,000 copies will be distributed.

DISTRIBUTION OF SPECIMENS IN THE COLLECTION

Specimens are accessioned individually except when groups of the same species having similar pertinent parameters (collecting site; type of disease; same experimental study, etc.) are received at the same time. We have been particularly fortunate that several collections of research material have been contributed en masse: e.g., RTLA 577 by Dr. William R. Duryee; RTLA 809 by Dr. Gladys S. King; and RTLA 443 by Miss Leora Stark, Mr. Douglas A. Stark, and Dr. James C. Dahl for Dr. Mary B. Stark.

As of 5 December 1973 there were 887 accessions in the collection distributed as follows:

DISTRIBUTION OF SPECIMENS IN THE COLLECTION (CONTD)

	<u>Neoplastic</u>	<u>Non-neoplastic</u>	<u>Indeterminant</u>	<u>Total</u>
Reptiles	38	53	0	91
Amphibians	41	36	0	77
Bony fish	252	156	22	430
Sharks	3	7	0	10
Lampreys	1	3	0	4
Tunicates	0	6	0	6
Mollusks	68	61	1	130
Echinoderms	0	5	1	6
Arthropods	6	73	3	82
Annelids	0	22	0	22
Acanthocephala	0	1	0	1
Platyhelminths	0	10	0	10
Coelenterates	0	7	7	14
Porifera	0	1	1	2
Protozoa	0	1	0	1
Fungi	0	1	0	1
	<hr/> 409	<hr/> 443	<hr/> 35	<hr/> 887

The non-neoplastic lesions include infectious and parasitic granulomas, developmental anomalies, and injury and wound repair. Indeterminant lesions either have not been fully examined or the material is inadequate for diagnosis.

Among the accessions with neoplasms, additional diseased specimens can be field collected in the following cases:

Tiger salamander	Fibroma/papilloma	Southcentral USA
Cunner	Papilloma	Northeast USA
White croaker	Papilloma	California, USA
Atlantic eel	Papilloma	Europe
Various flatfish	Papilloma	Western USA
Rock oyster	Papilloma	Australia
American oyster	Hematopoietic neoplasm	Eastern USA
Leopard frog	Renal adenocarcinoma	Northeast/Northcentral USA
Green turtle	Fibroma	Hawaii/Caribbean
Northern pike	Lymphosarcoma	Europe/North America
Various catfish	Papilloma/carcinoma	USA
Yellowfin goby	Papilloma	Japan/Korea
Goldfish	Fibroma	USA
Muskellunge	Lymphoma	North America

SUBMITTING SPECIMENS

We invite you to help in building this collection by submitting examples of induced or naturally occurring neoplasms, pre-neoplastic conditions, or indeterminate lesions of a presumptive neoplastic nature that require confirmation. As there is an indistinct boundary between

neoplastic disease and the process of inflammation, repair, and regeneration, examples of the latter processes are also useful to establish points of reference. If we prepare the material histologically, a set of slides will be returned to the contributor with our diagnosis.

Specimens are accepted alive, fixed, in blocks, and on slides. Frozen specimens are generally unsatisfactory for preparation of good histological material, but sometimes are useful when an infectious agent must be sought.

Many specimens arrive poorly fixed for the following reasons:

1. Delay in fixation - Specimens should be fixed immediately after death or when death is imminent since degeneration in some cells begins premortem. If a delay is unavoidable, specimens should be kept cool in the interim, BUT NOT FROZEN.
2. Slow or incomplete penetration - To remedy this we recommend:
 - a. Always open body cavity or inject fixative;
 - b. Either inject the fixative or preferably, make deep transverse incisions intermittently along the length of large tumors and organs. This is especially important for fixatives that penetrate slowly (e.g., 10 percent formalin);
 - c. Use fixatives that penetrate rapidly (Bouin's works well for fish, Davidson's for marine mollusks, and Dietrich's [FAA] for insects);
 - d. Remove air from the tracheae of insects by subjecting them to negative pressure (vacuum chamber) while immersed in the fixative for as long as bubbles continue to appear; and,
 - e. For electron microscopy submit bits of tissue, less than 2 mm in diameter, in glutaraldehyde.
3. Insufficient volume of fixative - A volume of chemical ten times the volume of the specimen is recommended.

REPRINT LIBRARY

A continuing project to assemble a complete library of reprints relating to neoplasms in invertebrates and poikilothermic vertebrate animals presently contains more than 2,500 reprints (see computer abstract form on next page) is nearing completion. Following final editing, searches will be made at a reasonable cost. WE WILL NOT HONOR REQUESTS FOR XEROX COPIES OF REPRINTS.

COMPUTER ABSTRACT FORM FOR REPRINT FILE

RESEARCH

While several research projects in cooperation with contributors are in early phases, the principal study has been on the nature, incidence, and etiology of epidermal carcinomas and papillomas in several populations of fish, under the auspices of the Committee on Comparative Oncology of the Union Internationale Contre le Cancer (UICC). This Committee is composed of eight scientists each of which, with a small work group, is making an in-depth study of one or two particular populations of lower animals with a significant incidence of a neoplastic disease. The purposes and objectives of this Committee have been described in detail by its Chairman (Dawe, C. J. Comparative Oncology and Environmental Carcinogens. UICC Bull. Cancer, 8(4): 2-3; Dec. 1970).

PAPERS WITH AVAILABLE COPIES

Harshbarger, J. C. & R. L. Taylor. Neoplasms of Insects. Annu. Rev. Entomol., 13: 159-190. (1968).

Cantwell, G. E., J. C. Harshbarger, R. L. Taylor, C. Kenton, M. S. Slatnick, & C. J. Dawe. A Bibliography of the Literature on Neoplasms of Invertebrate Animals. GANN Monogr. 5, pp. 57-84. (1968).

Harshbarger, J. C. The Registry of Tumors in Lower Animals. Natl. Cancer Inst. Monogr. 31, pp. XI-XVI. (1969).

Harshbarger, J. C. & G. W. Bane. Case Report of a Fibrolipoma on a Rockfish, Sebastodes diploproa. Natl. Cancer Inst. Monogr. 31, pp. 219-221. (1969).

Dawe, C. J. & J. C. Harshbarger (ed.). Natl. Cancer Inst. Monogr. 31: Neoplasms and Related Disorders of Invertebrate and Lower Vertebrate Animals. 772 pp. (1969).

Harshbarger, J. C., G. E. Cantwell, & M. F. Stanton. Effects of N-nitrosodimethylamine on the Crayfish, Procambarus clarkii. In: Proceedings: IVth International Colloquium on Insect Pathology [held in conjunction] with The Society for Invertebrate Pathology, 25-28 August 1970, College Park, Md., pp. 425-430. (1970).

Cosgrove, G. E. & J. C. Harshbarger. Testicular Tumor in a Salamander. J. Amer. Vet. Med. Assoc., 159: 582. (1971).

Zwart, P. & J. C. Harshbarger. Hematopoietic Neoplasms in Lizards: Report of a Typical Case in Hydrosaurus amboinensis and of a Probable Case in Varanus salvator. Intl. J. Cancer, 9: 548-553. (1972).

Harshbarger, J. C. Work of the Registry of Tumours in Lower Animals with Emphasis on Fish Neoplasms. Symp. Zool. Soc. London, No. 30: 285-303. (1972).

Harshbarger, J. C. Invertebrate Animals--What Can They Contribute to Cancer Research? Fed. Proc., 32: 2224-2227. (1973).

Harshbarger, J. C. & C. J. Dawe. Hematopoietic Neoplasms in Invertebrate and Poikilothermic Vertebrate Animals. In: Unifying Concepts of Leukemia, Bibl. haemat., No. 39, R. M. Dutcher & Chieco-Bianchi (ed.), pp. 1-25, Karger: Basel. (1973).

Harshbarger, J. C. & R. M. Faust. Environmental Factors Internal to the Host That Affect the Success of Microbial Insecticides. Ann. N. Y. Acad. Sci., 217: 131-140. (1973).

PAPERS IN PRESS

Harshbarger, J. C. Radiation, Neoplasms, Carcinogenic Chemicals, and Insects. In: Insect Diseases, Vol. 2, G. E. Cantwell (ed.), Marcel Dekker: New York. (expected May 1974).

Dawe, C. J. & J. C. Harshbarger. Neoplasms in Feral Fishes: Their Significance to Cancer Research. Symposium on Fish Pathology, 7-9 August 1972, Armed Forces Institute of Pathology, Washington, D.C. (expected Spring 1974).

HIGHLIGHTS

Some significant discoveries pertaining to cold-blooded animal tumors during the last decade are listed below. Numerous examples of these and similar cases have been contributed to the Registry for which we are greatly appreciative.

1. The initial discovery of the carcinogenicity of aflatoxins resulted from the study of hepatomas in hatchery rainbow trout. For brief history and tumor characteristics see Ashley, Laurence M. Liver Cell Carcinoma in Rainbow Trout. Amer. J. Pathol., 72: 345-348; 1973.
2. The first fish neoplasms of central nervous system origin: (1) an olfactory neuroepithelioma in a bloater (RTLA 257); and (2) a retinoneuroblastoma in a croaker (RTLA 650). Since neuroepitheliomas can be induced in hamsters by a nitrosamine [Herrold, K. Cancer, 17: 114-121; 1964] perhaps nitrosamines are a significant environmental pollutant.
3. A lamprey with a metastatic melanoma (RTLA 89) is the most primitive vertebrate in which a malignant type neoplasm has been found.
4. A hematopoietic neoplasm in a sandbar shark (RTLA 523) is the only blood cell tumor in a Chondrichthyes.
5. New evidence that a herpes virus causes the Lucké renal adenocarcinoma in leopard frogs.

6. The first reports of hematopoietic neoplasms in reptiles [Cowan, D. F. J. Amer. Vet. Med. Assoc., 153: 848-859, 1968; Frank, W. & A. Schepky. Pathol. Vet., 6: 437-443, 1969].
7. The only C-type virus in lower animals was discovered in a viper [Zeigel, R. F. & H. F. Clark. J. Natl. Cancer Inst., 43: 1097-1102; 1969] and DNA polymerase activity is associated with this RNA virus [Hatanaka, M. et al. Proc. Natl. Acad. Sci. USA, 67: 143-147; 1970].
8. Experimental studies on the epizootic hematopoietic neoplasms in northern pike (RTLA 112) and muskellunge (RTLA 808) suggests a viral etiology.
9. Transplantable hematopoietic neoplasms in a Mexican axolotl (RTLA 506).
10. Transplantable invasive neuroblastomas and imaginal disk neoplasms in insects (RTLA 381-383).
11. Epizootic hematopoietic neoplasms in various oysters and mussels involving two cell types (RTLA 224, 225, 235, 502).
12. Papillomas and carcinomas in bullheads from selected Florida lakes (RTLA 288, 289, and numerous others in the collection).
13. Papillomas in several populations of Australian oysters (RTLA 107, 151, 160-162, 215, 223).
14. Discovery of a herpes virus in an oyster [Farley, C. A., W. G. Banfield, G. Kasnic, Jr., & W. S. Foster. Science, 178: 659-760; 1972].
15. The first discovery of adenomatous polyps of gastric mucosa in cold-blooded animals (RTLA 570, 571). These tumors were found in trout which also had hepatomas. Aflatoxin was absent from the diet so some other carcinogen must have been involved.
16. Papillomas (RTLA 550-553) and an ameloblastic odontoma (RTLA 675) in cunners.
17. The first smooth muscle neoplasm (leiomyosarcoma) in a reptile (RTLA 560).
18. Epizootic skin neoplasms in neotenic tiger salamanders in a sewage settling pond (RTLA 791, 792).

19. Induction of hepatocellular and cholangiocellular neoplasms in guppies with azo compounds [Khudolei, V. V. *J. Ichthyol.* (English translation of *Voprosy Ikhtiologii*), 12: 319-324, 1972], in guppies and zebra fish with diethylnitrosamine [Stanton, M. F. *J. Natl. Cancer Inst.*, 34: 117-130, 1965] with dimethylnitrosamine [Khudolei, V. V. *Vopr. Onkol.*, 19: 88-94, 1973], and with nitrosomorpholine [Khudolei, V. V. (in press)].
20. Induction of hepatomas in trout and salmon with aflatoxin B₁, aflatoxin B₁ plus cyclopropene, urethane, dimethylnitrosamine, acetylaminofluorene, aminoazotoluene, para-dimethylaminoazobenzene and DDT and nephroblastomas in rainbow trout with dimethylnitrosamine [Reviewed by Wales, J. H. and by Ashley, L. M. In: A Symposium on Diseases of Fishes and Shellfishes, S. F. Snieszko (ed.), Am. Fisheries Soc. Special Pub. No. 5, 1970, pp. 351-365 and 366-379 respectively]. Examples of induced hepatomas and nephroblastomas in rainbow trout contributed by Dr. L. M. Ashley; RTLA 296-326.
21. Induction of papillomas and adenomas in apple snails by 20-methylcholanthrene and 3,4-benz-pyrene (RTLA 269). [See review: Krieg, K. Invertebraten in der Geschwulstforschung. Beiträge zur Krebsforschung, Vol. 12, Verlag Theodor Steinkopff: Dresden, 215 pp., 1973].

PERSONNEL

The Project Officer for the contract is Dr. Clyde J. Dawe, Head, Comparative Oncology Section, Laboratory of Pathology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, 20014.

The Principal Investigator for the contract is Dr. David L. Pawson, Chairman, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., 20560.

The Staff of the Registry is as follows:

Director - John C. Harshbarger

Registrar - Phyllis M. Schellenger

Histopathology Technician - Linda J. Cullen

Bibliographers - Judy E. Foster and Marilyn S. Slatick

LIST OF ACCESSIONS

A diagnosis or very brief description of the nature of the lesion is given in most cases. This description may be ours or the contributor's. The reprint cited is either a report on that specific case or a recent article in a series of pertinent articles.

RTLA 1. Planarian, Dugesia dorotocephala

Material: Six slides; 12 photographs

Diagnosis: Papilliform tumors and malformations

Submitter: J. A. Foster

Reprints: Foster, Jean A. Induction of Neoplasms in Planarians with Carcinogens. *Cancer Res.*, 23: 300-303. 1963.

Foster, Jean A. Malformations and Lethal Growths in Planaria Treated with Carcinogens. *Natl. Cancer Inst. Monogr.* 31: 683-691. 1969.

RTLA 2. Earthworm, Lumbricus terrestris

Material: Fifteen slides; 4 photographs

Diagnosis: A large protruding mass containing spermatogonia and maturation phases of sperm occurring in an area that had received 14 daily paintings on the cuticle of a methylcholanthrene-acetone solution.

Submitter: R. L. Hancock

Reprint: Hancock, R. L. An Unusual Neoplasm in Lumbricus terrestris. *Experientia*, 21(5): 280-281. 1965.

RTLA 3. Drosophila melanogaster

Material: Five slides; 6 photographs

Diagnosis: Hereditary ovarian tumors

Submitter: R. C. King

Reprint: King, Robert C. Control of Oocyte Formation by Female-Sterile (fes) Drosophila melanogaster. *Natl. Cancer Inst. Monogr.* 31: 347-349. 1969.

RTLA 4. Blue crab, Callinectes sapidus

Material: One crab; 3 photographs; 40 slides; 2 paraffin blocks

Diagnosis: Wound healing on dorsal cephalothorax

Submitter: C. J. Dawe

RTLA 5. Mud clam, Mya arenaria

Material: One siphon; 3 photographs; 17 slides with serial sections

Diagnosis: Developmental anomaly of siphon

Submitter: M. Potter and E. Kuff

RTLA 6. Striped bass, Morone saxatilis

Material: Testes -- one with adjacent mass; 1 photograph; 1 slide

Diagnosis: Spermatocele

Submitter: F. Schwartz

RTLA 7. White sucker, Catostomus commersoni

Material: Three fish; 3 slides

Diagnosis: Cholangiocellular neoplasms; no evidence of metastases

Submitter: C. J. Dawe, M. Stanton, and F. Schwartz

Reprint: Dawe, Clyde J., Mearl F. Stanton, and Frank J. Schwartz.

Hepatic Neoplasms in Native Bottom-feeding Fish of Deep Creek Lake, Maryland. *Cancer Res.*, 24(7): 1194-1201. 1964.

RTLA 8. Brown bullhead, Ictalurus nebulosus

Material: One fish; 2 slides

Diagnosis: (1) Regenerative hepatic nodules

(2) Minimal deviation hepatomas

Submitter: C. J. Dawe and M. Stanton

Reprint: [see RTLA 7]

RTLA 9. Brown bullhead, Ictalurus nebulosus

Material: Three slides; 1 photograph

Diagnosis: Chronic inflammation -- foreign body reaction

Submitter: C. J. Dawe

RTLA 10. Chain pickerel, Esox niger

Material: Two slides

Diagnosis: Pseudobranch (normal)

Submitter: C. J. Dawe

RTLA 11. Goldfish, Carassius auratus

Material: Two slides

Diagnosis: Neurilemmoma

Submitter: T. M. Scotti

RTLA 12. Green turtle, Chelonia mydas

Material: Three bottles of wet tissue; 4 photographs; 2 slides

Diagnosis: Fibropapillomas

Submitter: G. H. Waddell

RTLA 13. Shark

Material: Wet tissue; 4 slides; 2 photographs

Diagnosis: (1) Subepicardial hemorrhages in association with lymphoid aggregates

(2) Myocardial infestation by indeterminate organism -- possible sarcosporidia

Submitter: R. F. Mathewson

RTLA 14. Largemouth bass, Micropterus salmoides

Material: One fish; 1 slide; 4 photographs

Diagnosis: Intra-epidermal nevus

Submitter: C. J. Dawe

RTLA 15. Largemouth bass, Micropterus salmoides

Material: One fish; 1 slide, 5 photographs

Diagnosis: Ossifying fibroma

Submitter: C. J. Dawe

RTLA 16. Largemouth bass, Micropterus salmoides

Material: One fish; 4 slides; 3 photographs

Diagnosis: Intraepithelial hyperpigmentation by numerous dendritic melanocytes in all layers of epidermis

Submitter: C. J. Dawe

RTLA 17. Dagger shrimp, Palaemonetes pugio

Material: One slide

Diagnosis: Metacercaria of Microphallus turgida infected with a haplosporidium, Urosporidium fuliginosum

Submitter: R. W. Heard

RTLA 18. Atlantic needlefish, Strongylura marina

Material: Sixteen heads of fish; 3 slides; photographs

Diagnosis: Chronic inflammation due to copepod parasites in the jaw

Submitter: J. M. Arnold

Reprint: Cressey, Roger F. and Bruce B. Collette. Copepods and Needlefishes: A Study in Host-Parasite Relationships.

U.S. Fish Wildl. Serv. Fish. Bull., 68(3): 347-432. 1970.

RTLA 19. Atlantic octopus, Octopus vulgaris

Material: One paraffin embedded block; 5 slides; 2 photographs

Diagnosis: Probable wound repair and hyperplasia in web area between the two anterior arms

Submitter: J. M. Arnold

RTLA 20. California sea mussel, Mytilus californianus

Material: Two slides

Diagnosis: Digestive gland lesions caused by haplosporidian parasites

Submitter: R. L. Taylor

Reprint: Taylor, Ronald L. Haplosporidium tumefaciens sp. n., the Etiologic Agent of a Disease of the California Sea Mussel, Mytilus californianus Conrad. J. Invertebr. Pathol., 8(1): 109-121. 1966.

RTLA 21. Gaper clam, Tresus nuttalli

Material: Two slides

Diagnosis: Inflammatory reaction of foot muscle; associated with unclassified microbes producing exophytic lesions

Submitter: R. L. Taylor and A. C. Smith

Reprint: Taylor, Ronald L. and Albert C. Smith. Polypoid and Papillary Lesions in the Foot of the Gaper Clam, Tresus nuttalli. J. Invertebr. Pathol., 8(2): 264-266. 1966.

RTLA 22. Walleye, Stizostedion vitreum vitreum

Material: One fish; 14 slides

Diagnosis: Lymphocystis

Submitter: M. Stanton

RTLA 23. Chain pickerel, Esox niger

Material: Two slides

Diagnosis: Parasitic infestation of gills; unclassified protozoan

Submitter: C. J. Dawe

RTLA 24. White sucker, Catostomus commersoni

Material: One fish

Diagnosis: Ovarian cyst (non-neoplastic)

Submitter: M. Stanton

RTLA 25. Rainbow trout, Salmo gairdneri

Material: Three jars of gross specimens; 16 photographs

Diagnosis: Hepatoma

Submitter: C. E. Dunbar

RTLA 26. Drosophila melanogaster

Material: One block; 9 slides; 14 photographs

Diagnosis: Melanotic lesions involving fat body

Submitter: S. Ghelelovitch

Reprint: Ghelelovitch, Sabbas. Effets tumorigènes de la leucine, de l'uridine et de la thymidine tritiées chez les larves de la Drosophile. C. R. Hebd. Séances Acad. Sci., Ser. D, Sci. Nat. (Paris), 262: 1173-1176. 1966.

RTLA 27. Spruce sawfly, Diprion hercyniae

Material: Twelve adults; 3 pupae; numerous midgut tumorlike bodies; 42 slides

Diagnosis: Polyhedral virus infection

Submitter: M. M. Neilson

Reprint: Neilson, M. M. and D. E. Elgee. Tumorlike Bodies in Virus-Infected and Noninfected Adults of the Spruce Sawfly, Diprion hercyniae. J. Invertebr. Pathol., 10: 70-75. 1968.

RTLA 28. Greater wax moth, Galleria mellonella

Material: Three slides; 15 photographs

Diagnosis: Whorl formations in irradiated animals by hemocytes

Submitter: J. C. Harshbarger

Reprint: Harshbarger, John C. and B. Shain Moore. Some Effects of X-irradiation on Larvae of Galleria mellonella. J. Invertebr. Pathol., 8(2): 277-279. 1966.

RTLA 29. Sea lamprey, Petromyzon marinus

Material: Two pieces of skin; 10 slides

Diagnosis: Inflammation associated with bacterial infection

Submitter: L. N. Allison

RTLA 30. Planarian, Dugesia dorotocephala

Material: Four adult planarians; 66 slides; photographs

Diagnosis: Swellings -- dorsum of tail; indeterminate nature

Submitter: R. Kenk

RTLA 31. Claw-footed toad, Xenopus laevis

Material: One block of fixed material; 4 photographs; 18 slides

Diagnosis: Tuberculoma -- leg muscle

Submitter: E. Elkan

RTLA 32. Claw-footed toad, Xenopus laevis

Material: One block of fixed material; 4 slides

Diagnosis: Nephroblastoma

Submitter: E. Elkan

Reprint: Elkan, E. Three Different Types of Tumors in Salientia. *Cancer Res.*, 23(10): 1641-1645. 1963.

RTLA 33. Earthworm, Lumbricus terrestris

Material: One earthworm; 10 slides; 4 photographs

Diagnosis: Contracted scar due to injury plus multiple parasitic lesions

Submitter: E. Holland

RTLA 34. Painted turtle, Chrysemys picta

Material: Head of turtle; 12 slides; 7 photographs

Diagnosis: Otitis media with foreign body reaction

Submitter: H. Miller

RTLA 35. Pond snail, Physa heterostropha

Material: Two slides

Diagnosis: "Cyst-like" bodies primarily on reproductive organs due to microsporidian parasite

Submitter: E. H. Michelson

Reprint: Michelson, Edward H. *Plistophora husseyi* sp. n., a Microsporidian Parasite of Aquatic Pulmonate Snails. *J. Insect Pathol.*, 5(1): 28-38. 1963.

RTLA 36. Bilharzia snail, Australorbis glabratus

Material: Three slides

Diagnosis: Tubercle-like lesions of tentacles and head region due to infection by acid-fast bacteria

Submitter: E. H. Michelson

RTLA 37. Pacific oyster, Crassostrea gigas

Material: Thirty-seven slides; 4 blocks

Diagnosis: Fibrous tumor of gonadal origin

Submitter: G. B. Pauley

Reprint: Pauley, Gilbert B. and Clyde S. Sayce. An Internal Fibrous Tumor in a Pacific Oyster *Crassostrea gigas*. *J. Invertebr. Pathol.*, 10(1): 1-8. 1968.

RTLA 38. Freshwater mussel, Anodonta californiensis

Material: Eight slides; 1 block

Diagnosis: Polypoid hyperplasia of submucosal glands of foot

Submitter: G. B. Pauley

Reprint: Pauley, Gilbert B. Four Freshwater Mussels (*Anodonta californiensis*) with Pedunculated Adenomas Arising from the Foot. *J. Invertebr. Pathol.*, 9(4): 459-466. 1967.

RTLA 39. Hydra

Material: One slide

Diagnosis: Developmental anomaly; teratogenesis (?)

Submitter: E. Holland

RTLA 40. *Hydra*

Material: Normal; budding and degenerate growths; 14 slides;
4 photographs
Diagnosis: Developmental anomaly; teratogenesis (?)
Submitter: E. Holland

RTLA 41. Leopard frog, *Rana pipiens*

Material: One kidney; 3 photographs; 10 slides
Diagnosis: Urethane-induced renal adenocarcinoma
Submitter: J. S. Waterhouse

RTLA 42. Seahorse, *Hippocampus* sp.

Material: One gross specimen (mass near eye); 8 slides
Diagnosis: Parasitic lesion -- probably microsporidian
Submitter: M. M. Sigel

RTLA 43. European corn borer, *Ostrinia nubilalis*

Material: One larva; 6 photographs; 34 slides
Diagnosis: Pigmented cuticular projection with underlying hemocyte reaction
Submitter: H. L. Zimmack

RTLA 44. Leafhopper, *Agallia constricta*

Material: Two electron photomicrographs; 6 photographs
Diagnosis: Ganglion cells infected with wound tumor virus
Submitter: K. Maramorosch
Reprint: Maramorosch, K., E. Shikata, H. Hirumi, and R. R. Granados.
Multiplication and Cytopathology of a Plant Tumor Virus in Insects. Natl. Cancer Inst. Monogr. 31: 493-507. 1969.

RTLA 45. Khapra beetle, *Trogoderma granarium*

Material: Six adult beetles
Diagnosis: Cuticular deformations
Submitter: R. G. Strong
Reprint: Strong, R. G. On Deformities of the Khapra Beetle,
Trogoderma granarium Everts (Coleoptera: Dermestidae).
Wasmann J. Biol., 17(2): 273-278. 1959.

RTLA 46. Granary weevil, *Sitophilus granarius*

Material: One adult weevil
Diagnosis: Cuticular deformations
Submitter: R. G. Strong
Reprint: Strong, R. G. To the Teratology of the Granary Weevil,
Sitophilus granarius (Linnaeus) (Coleoptera: Curculionidae).
Wasmann J. Biol., 17(1): 65-68. 1959.

RTLA 47. Variegated cutworm, *Peridroma saucia*

Material: One slide; 4 photographs
Diagnosis: Granulosis virus infection showing hyperplasia, chromosome bridges and fragments, and multipolar filaments in the fat body
Submitter: M. E. Martignoni
Reprint: Martignoni, Mauro E. and James E. Milstead. Glutamate-Aspartate Transaminase Activity in the Blood Plasma of an Insect During the Course of Two Viral Diseases. Ann. Entomol. Soc. Am., 60(2): 428-431. 1967.

RTLA 48. Variegated cutworm, Peridroma saucia

Material: One slide

Diagnosis: Granulosis virus infection showing nodule ("giant cell") formation in the hemocoel

Submitter: M. E. Martignoni

Reprint: [see RTLA 47]

RTLA 49. Drosophila melanogaster

Material: One slide; 2 photographs

Diagnosis: "Brown tumors" in brown tumor strain

Submitter: M. E. Martignoni

RTLA 50. King crab, Limulus polyphemus

Material: One lateral eye; 4 photographs; 42 slides

Diagnosis: Foreign body with inflammatory reaction

Submitter: M. L. Behrens

RTLA 51. Crab

Material: Portions of exoskeleton with protuberances

Diagnosis: Undetermined

Submitter: W. Schmitt and P. Kier

RTLA 52. Hydra, Chlorohydra viridissima

Material: Three vials of hydra; 19 photographs; 7 slides

Diagnosis: Giant mutants; heterocytes; and normal individuals

Submitter: H. M. Lenhoff

Reprint: Lenhoff, Howard M., Charles Rutherford, and H. D. Heath.
Anomalies of Growth and Form in Hydra: Polarity, Gradients,
and a Neoplasia Analog. Natl. Cancer Inst. Monogr. 31:
709-737. 1969.

RTLA 53. Queenfish, Seriphis politus

Material: Five fish; 9 photographs; 3 slides

Diagnosis: Focal swellings on lip; tissue too disrupted by
freezing for diagnosis

Submitter: R. C. Fay

RTLA 54. Coral, Madrepora kauaiensis

Material: Three photographs

Diagnosis: Anomalous growths; neoplasia versus reaction to parasites

Submitter: D. F. Squires

Reprints: Squires, Donald F. Neoplasia in a Coral? Science,
148(3669): 503-505. 1965.

White, Philip R. and John D. Soule [comments on Squires'
article and Squires' rebuttal to their comments]. Science,
150(3692): 77-78. 1965.

RTLA 55. American chameleon, Anolis carolinensis

Material: One adult chameleon

Diagnosis: Cyst on neck; probably inflammatory origin

Submitter: E. C. Bay

RTLA 56. American cockroach, *Periplaneta americana*

Material: Eight slides; 8 vials of specimens; 36 photographs

Diagnosis: Abnormal salivary glands induced by ligature or nerve severance

Submitter: D. J. Sutherland

Reprints: Sutherland, D. J. Experimentally Induced Tumours in *Periplaneta americana* L. J. Insect Physiol., 9: 131-135. 1963.

Sutherland, Donald J. The Development of Salivary Tumours in *Periplaneta americana* (L.) as Induced by Duct Ligation. J. Insect Physiol., 13: 137-152. 1967.

RTLA 57. Silver dollar or Spotted metynnus, *Metynnus maculatus*

Material: Gross specimen; 7 slides; 2 photographs

Diagnosis: Parasitic infestation (protozoan)

Submitter: M. Stanton

RTLA 58. Yellowfin goby, *Acanthogobius flavimanus*

Material: Four fish; 9 slides; 4 photographs

Diagnosis: Epithelial papillomas

Submitter: Y. Ito

RTLA 59. Crayfish, *Procambarus clarki*

Material: One crayfish

Diagnosis: Limb loss with failure of regeneration; etiology (?)

Submitter: C. A. G. Wiersma

RTLA 60. Leopard frog, *Rana pipiens*

Material: Two slides

Diagnosis: Renal adenocarcinoma

Submitter: A. Granoff

RTLA 61. Splitnose rockfish, *Sebastodes diploproa*

Material: Nineteen slides; 47 photographs

Diagnosis: Lipoma

Submitter: J. C. Harshbarger

Reprint: Harshbarger, John C. and G. W. Bane. Case Report of a Fibrolipoma on a Rockfish, *Sebastodes diploproa*. Natl. Cancer Inst. Monogr. 31: 219-221. 1969.

RTLA 62. White croaker, *Genyonemus lineatus*

Material: Numerous fish; slides; photographs

Diagnosis: Epithelial papillomas

Submitter: J. C. Harshbarger

Reprint: Harshbarger, John C. Work of the Registry of Tumours in Lower Animals with Emphasis on Fish Neoplasms. Symp. Zool. Soc. London, No. 30: 285-303. 1972.

RTLA 63. Giant leathery turtle, *Dermochelys coriacea*

Material: Nine slides; 3 photographs

Diagnosis: Granulomatous reaction; etiology (?)

Submitter: J. R. Hendrickson

RTLA 64. Nudibranch, Hermissenda crossicornis

Material: Two electron photomicrographs

Diagnosis: Unclassified microorganism in receptor cells

Submitter: J. Westfall

RTLA 65. House fly, Musca domestica

Material: Nineteen photographs

Diagnosis: Focal lesions in hypodermis, midgut, and fat bodies induced by carcinogenic fluorenamine derivatives

Submitter: G. E. Cantwell

Reprint: Shortino, Thomas J., George E. Cantwell, and W. E. Robbins. Effect of Certain Carcinogenic 2-Fluorenamine Derivatives on Larvae of the House Fly, Musca domestica Linnaeus. *J. Insect Pathol.*, 5: 489-497. 1963.

RTLA 66. Guppy, Poecilia reticulata

Material: Gross specimens

Diagnosis: Infected with gram negative rod-shaped bacteria

Submitter: T. Kozma

RTLA 67. Red-spotted newt, Notophthalmus viridescens

Material: One gross specimen; 4 slides; 17 photographs

Diagnosis: Helminth cysts

Submitter: H. Evans

RTLA 68. Locusta migratoria

Material: Seven slides; 4 photographs

Diagnosis: Gregarine parasitic infestation

Submitter: G. Matz

RTLA 69. Madeira cockroach, Leucophaea maderae

Material: Two slides

Diagnosis: Salivary reservoir lesions resulting from nerve severance

Submitter: G. Matz

Reprint: Matz, G. Tumeurs Expérimentales chez Leucophaea maderae F. et Locusta migratoria L. *J. Insect Physiol.*, 6: 309-313. 1961.

RTLA 70. Alpine newt, Triturus alpestris

Material: Four slides

Diagnosis: Epithelioma

Submitter: G. Matz

Reprint: Matz, Gilbert. Un Cas d'Épithélioma Épidermique chez Triturus alpestris Laur. (Amphibien, Salamandridé). *Bull. Soc. Zool. France*, 91(4): 707-708 and one Plate. 1966.

RTLA 71. Acipenseriformes

Material: Three specimens

Diagnosis: Ridge scales and fin spines (fossils)

Submitter: J. T. Gregory

RTLA 72. Osteichthyes

Material: Three specimens
Diagnosis: Pachyostose opercularis (fossils)
Submitter: J. T. Gregory

RTLA 73. American bullfrog, Rana catesbeiana

Material: Fourteen paraffin blocks; 3 photographs; 7 slides
Diagnosis: Inflammatory lesions
Submitter: D. DuBois

RTLA 74. Snapping turtle, Chelydra serpentina

Material: Eleven paraffin blocks; 3 photographs; slides
Diagnosis: Degenerative lesions
Submitter: D. DuBois

RTLA 75. Guppy, Poecilia reticulata

Material: Thirteen fish -- 6 with thoracic teratomas; 96 slides;
21 photographs
Diagnosis: Teratoid anomalies
Submitter: R. Wenk

RTLA 76. Moon snail, Polinices lewsi

Material: Three slides
Diagnosis: Infection -- with inflammatory reaction
Submitter: R. L. Taylor
Reprint: Smith, Albert C. and Ronald L. Taylor. Tumefactions
(Tumorlike Swellings) on the Foot of the Moon Snail
Polinices lewsi. J. Invertebr. Pathol., 10(2):
263-268. 1968.

RTLA 77. Rainbow trout, Salmo gairdneri

Material: Two fish; 5 livers; 12 slides
Diagnosis: (1) hepatomas; (2) trabecular hepatocarcinoma; and
(3) adenosarcoma (carcinosarcoma)
Submitter: J. H. Wales
Reprint: Wales, J. H. and R. O. Sinnhuber. An Early Hepatoma
Epizootic in Rainbow Trout, Salmo gairdnerii. Calif.
Fish Game, 52: 85-91. 1966.

RTLA 78. Spruce budworm, Choristoneura fumiferana

Material: Seventeen larvae and one pupa; 4 photographs
Diagnosis: Epidermal necrosis and hyperplasia with sloughing of
the cuticle possibly due to contact with a toxic material
Submitter: R. L. Lyon

RTLA 79. Crayfish, Orconectes rusticus

Material: One slide
Diagnosis: Duct obstruction with necrosis and inflammatory
reaction in the hepatopancreas
Submitter: J. Hubschman

RTLA 80. Earthworm, Lumbricus sp.

Material: One earthworm; 4 photographs; 10 slides
Diagnosis: Multiple parasitic lesions
Submitter: E. Holland

RTLA 81. Drosophila melanogaster

Material: Three vials of adults; 4 photographs; a list of mutants that produce melanotic tumors; descriptions of mutants causing tumors; and a list of laboratories that carry tumorous stocks and the stocks they carry
Diagnosis: Freckled strain
Submitter: D. L. Lindsley

RTLA 82. Dace

Material: One gross specimen; 7 photographs
Diagnosis: Parasitic cyst; myxosporida suspected
Submitter: R. D. Schick

RTLA 83. Sea urchin test

Material: Six photographs and x-ray films
Diagnosis: Repair after transection of radial canals
Submitter: G. R. Clark, II

RTLA 84. American brook lamprey, Lampetra lamottei

Material: One gross specimen; 8 photographs; 3 slides
Diagnosis: Multiple granulomas in response to helminth parasites
Submitter: J. H. Howell

RTLA 85. Silkworm, Bombyx mori

Material: Seven slides
Diagnosis: Abnormal proliferation of epidermal cells in larvae infected with Tipula iridescent virus
Submitter: T. Hukuhara
Reprint: Hukuhara, Toshihiko. Induction of Epidermal Tumor in Bombyx mori (Linnaeus) with Tipula Iridescent Virus. J. Insect Pathol., 6: 246-248. 1964.

RTLA 86. Brown bullhead, Ictalurus nebulosus

Material: One fish head; 4 photographs; 2 slides
Diagnosis: Melanoma
Submitter: L. N. Allison

RTLA 87. Western fence lizard, Sceloporus occidentalis

Material: One gross lizard; 4 photographs
Diagnosis: Infectious granuloma; bacterial origin suspected
Submitter: C. Gans

RTLA 88. Goldfish, Carassius auratus

Material: Two pieces of tissue; 6 slides; 3 photographs
Diagnosis: Fibromyxosarcoma
Submitter: Fisheries Research Board of Canada

RTLA 89. Sea lamprey, Petromyzon marinus

Material: One gross lamprey; photographs; slides
Diagnosis: Melanoma with metastases
Submitter: J. H. Howell
Reprint: Dawe, C. J. and J. C. Harshbarger. Neoplasms in Feral Fishes: Their Significance to Cancer Research. (see "Papers in Press" on p. 7).

RTLA 90. Housefly, Musca domestica

Material: Adult flies; 10 photographs

Diagnosis: (1) melanotic tumors
(2) melanotic sclerosis

Submitter: R. P. Bodnaryk

Reprint: Bodnaryk, Robert P. Dietary Amino Acid and Nucleic Acid Imbalance Leading to Altered Tumour Frequency in the Adult Housefly, Musca domestica. J. Insect Physiol., 14: 223-242. 1968.

RTLA 91. Blue gourami, Trichogaster trichopterus

Material: Three blocks of tissue; 15 photographs; 16 slides

Diagnosis: Granulomatous inflammatory reaction involving gut, spleen, and liver

Submitter: D. O. Carpenter

RTLA 92. Butter clam, Saxidomus giganteus

Material: One clam; 1 photograph; 10 slides; 2 blocks

Diagnosis: Polypoid developmental anomaly of foot

Submitter: G. Pauley

Reprint: [see RTLA 136]

RTLA 93. Walleye, Stizostedion vitreum vitreum

Material: Head of fish; 5 photographs; 9 slides

Diagnosis: Multiple fibrosarcomas with ossification

Submitter: L. N. Allison

RTLA 94. Painted turtle, Chrysemys picta

Material: One gross turtle; 14 photographs

Diagnosis: Epidermoid cyst on neck

Submitter: K. Potter

RTLA 95. Garter snake, Thamnophis sirtalis

Material: Two slides

Diagnosis: (1) fibropapilloma
(2) sertoli cell tumor

Submitter: L. Karstad

RTLA 96. Fox snake, Elaphe vulpina

Material: One snake with abdominal mass

Diagnosis: Pararenal hematoma

Submitter: C. Gans

RTLA 97. Mud puppy, Necturus maculosus

Material: One kidney; 6 photographs; 6 slides

Diagnosis: Undifferentiated renal neoplasm; probably metastatic

Submitter: C. H. Nauman

RTLA 98. Redtailed black shark, Labeo bicolor

Material: One gross fish; 14 photographs; 7 slides

Diagnosis: Infectious granuloma

Submitter: J. A. Zgurzynski

RTLA 99. Bloater, Coregonus hoyi

Material: Rear half of fish; 8 photographs; 3 slides

Diagnosis: Spindle cell sarcoma (possible neural origin)

Submitter: L. N. Allison

RTLA 100. Clematis blister beetle, Epicauta cinerea

Material: Gross specimens of gut; 15 slides; 12 photographs

Diagnosis: Hyperplastic outgrowths on midgut; etiology undetermined

Submitter: A. P. Gupta

Reprint: Gupta, A. P. Midgut lesions in Epicauta cinerea
(Coleoptera: Meloidae). Ann. Entomol. Soc. Am., 63:
1786-1788. 1970.

RTLA 101. Black crappie, Pomoxis nigromaculatus

Material: One fish

Diagnosis: Lipoma; with large growth in anterior abdominal region

Submitter: G. W. Camenisch

RTLA 102. Planarian, Dugesia dorotocephala

Material: One gross specimen; photographs

Diagnosis: Abnormal regeneration

Submitter: M. Jenkins

RTLA 103. Spot, Leiostomus xanthurus

Material: One fish; 5 photographs; 19 slides

Diagnosis: Anterior abdominal tumor produced by a microsporidian

Submitter: V. Sprague

Reprint: Sprague, Victor. Microsporida and Tumors with
Particular Reference to the Lesion Associated with
Ichthyosporidium sp. Schwartz, 1963. Natl. Cancer
Inst. Monogr. 31: 237-249. 1969.

RTLA 104. Earthworm, Lumbricus sp.

Material: One earthworm; 4 photographs

Diagnosis: Secondary tail of 15 segments

Submitter: E. Holland

RTLA 105. Coho salmon, Oncorhynchus kisutch

Material: One fish fillet; 8 photographs; 10 slides

Diagnosis: Neurofibroma

Submitter: W. G. Yoder

RTLA 106. Lingcod, Ophiodon elongatus

Material: Segment of animal with dorsal fin; 5 photographs; 2 slides

Diagnosis: Lymphocystis

Submitter: Fisheries Research Board of Canada

RTLA 107. Sydney rock oyster (Australian), Crassostrea commercialis

Material: Twenty photographs; 17 slides

Diagnosis: Papillary epitheliomas of the mantle

Submitter: P. H. Wolf

Reprint: Wolf, Peter H. Neoplastic Growth in Two Sydney Rock
Oysters, Crassostrea commercialis (Iredale and Roughley).
Natl. Cancer Inst. Monogr. 31: 563-573. 1969.

RTLA 108. Pacific oyster, Crassostrea gigas

Material: Four slides
Diagnosis: Ganglioneuromas; watery cyst
Submitter: G. B. Pauley
Reprint: Pauley, Gilbert B., Albert K. Sparks, and Clyde S. Sayce.
An Unusual Internal Growth Associated with Multiple
Watery Cysts in a Pacific Oyster (Crassostrea gigas).
J. Invertebr. Pathol., 11(3): 398-405. 1968.

RTLA 109. Claw-footed toad, Xenopus laevis

Material: Fifteen slides
Diagnosis: Granulomatous disease containing acid-fast bacteria
Submitter: L. N. Ruben
Reprint: Ruben, L. N., M. Balls, J. Stevens, and N. S. Rafferty.
A New Transmissible Disease in the South African Clawed
Toad, Xenopus laevis. Oncology, 23: 228-237. 1969.

RTLA 110. Giant conch, Strombus gigas

Material: Two slides
Diagnosis: Inflammatory reaction; cause indeterminate
Submitter: M. M. Sigel

RTLA 111. Moray

Material: Two slides
Diagnosis: Nonsuppurative panniculitis
Submitter: M. M. Sigel

RTLA 112. Northern pike, Esox lucius

Material: Gross specimens from the jaws and trunks; 3 slides
Diagnosis: Lymphosarcomas
Submitter: M. F. Mulcahy
Reprint: Mulcahy, Maire F., Goesta Winqvist, and Clyde J. Dawe.
The Neoplastic Cell Type in Lymphoreticular Neoplasms of
the Northern Pike, Esox lucius L. Cancer Res., 30(11):
2712-2717. 1970.

RTLA 113. Box turtle, Terrapene carolina

Material: Three slides
Diagnosis: Ear infection
Submitter: W. Dix

RTLA 114. Coral, several species

Material: Twenty-one photographs
Diagnosis: Anomalous growths; neoplasia versus reaction to parasites
Submitter: D. F. Squires

RTLA 115. Mud clam, Mya arenaria

Material: Seven slides
Diagnosis: Papillary lesions at pedal orifice
Submitter: P. R. Nelson

RTLA 116. Boa constrictor, Boa constrictor

Material: Two bottles of tissue; 45 slides; 8 photographs
Diagnosis: Infectious granulomas of indeterminate etiology
Submitter: B. L. Burge

RTLA 117. Cobra, Naja naja

Material: Heart and tumor-like growth of specimen
Diagnosis: Fibrinous pericarditis and subepicardial myocarditis
Submitter: W. E. Haast

RTLA 118. Largescale sucker, Catostomus macrocheilus

Material: Specimen of anal fin; 7 photographs; 2 slides
Diagnosis: Papillary epithelioma (non-invasive)
Submitter: J. R. Adams

RTLA 119. Planarians, Dugesia and Crenobia

Material: Seven slides
Diagnosis: Histopathologic effects of insecticides
Submitter: H. An der Lan
Reprint: An der Lan, Hannes. Histopathologische Auswirkungen von Insektiziden (DDT und Sevin) bei Wirbellosen und ihre cancerogene Beurteilung. Mikroskopie, 17: 85-112. 1962.

RTLA 120. Water snake, Xenochrophis piscator

Material: Nine slides; 8 photographs
Diagnosis: Granulomas
Submitter: P. Zwart

RTLA 121. Green turtle, Chelonia mydas

Material: Six bottles of specimens; 5 slides; 27 photographs
Diagnosis: Fibroma
Submitter: A. C. Smith

RTLA 122. Skipjack tuna, Euthynnus pelamis

Material: Two photographs; 2 slides
Diagnosis: Puffy snout disease (fibrosis and inflammation)
Submitter: J. C. Marr

RTLA 123. Mountain pine beetle, Dendroctonus ponderosae

Material: Three beetles with cuticular vesicle on elytral declivities
Diagnosis: Possible physical trauma in emergence
Submitter: G. D. Amman

RTLA 124. Firemouth, Cichlasoma meeki

Material: One fish; 2 slides; 11 photographs
Diagnosis: Mechanical injury
Submitter: H. McCarthy

RTLA 125. Pilot black snake, Elaphe obsoleta obsoleta

Material: One snake; 9 slides; 7 photographs
Diagnosis: Infectious granuloma
Submitter: R. Tuck, Jr.

RTLA 126. Edible shrimp, Penaeus aztecus

Material: Two gross specimens; 10 photographs
Diagnosis: Ulcerative ventral lesion posterior to walking legs
Submitter: R. Neal

RTLA 127. Northern pike, Esox lucius

Material: Three slides

Diagnosis: Lymphosarcoma

Submitter: R. F. Nigrelli

Reprint: Nigrelli, Ross F. Spontaneous Neoplasms in Fishes.

III. Lymphosarcoma in Astyanax and Esox. *Zoologica*
(N. Y.), 32(2): 101-108. 1947.

RTLA 128. Lightning bug, Photurus sp.

Material: Four specimens; 5 photographs

Diagnosis: Late stage of wound repair

Submitter: M. McLean

RTLA 129. Bullhead, Ictalurus sp.

Material: Gross specimen; 17 slides; 6 photographs

Diagnosis: Melanoma

Submitter: J. J. Christian

RTLA 130. Neotropical race runner, Cnemidophorus lemniscatus

Material: Gross specimen; 24 photographs; 9 slides

Diagnosis: Multiple infectious bacterial granuloma

Submitter: R. Tuck, Jr.

RTLA 131. Hydrazoid, Bimera sp.

Material: Gross specimen; 6 photographs

Diagnosis: Pending

Submitter: H. Park

RTLA 132. Freshwater mussel, Anodonta californiensis

Material: Nine gross specimens

Diagnosis: Polypoid hyperplasia

Submitter: G. B. Pauley; Reprint: [see RTLA 140]

RTLA 133. Freshwater mussel, Anodonta oregonensis

Material: Gross specimen

Diagnosis: Polypoid hyperplasia

Submitter: G. B. Pauley; Reprint: [see RTLA 140]

RTLA 134. Oyster, Crassostrea gigas

Material: Gross specimen

Diagnosis: Large watery cyst anterior to heart

Submitter: G. B. Pauley; Reprint: [see RTLA 108]

RTLA 135. Oyster, Crassostrea gigas

Material: One slide

Diagnosis: Endematos mesenchymal tumor

Submitter: G. B. Pauley and A. K. Sparks; Reprint: Sparks, Albert K.,
Gilbert B. Pauley, and Kenneth K. Chew. A Second Mesen-
chymal Tumor From a Pacific Oyster (Crassostrea gigas).
Proc. Natl. Shellfish. Assoc., 59: 35-39. 1969.

RTLA 136. Smooth Washington clam, Saxidomus giganteus

Material: Two slides; 1 block

Diagnosis: Polypoid tumor on foot

Submitter: G. B. Pauley; Reprint: Pauley, Gilbert B. A Butter Clam
(Saxidomus giganteus) with a Polypoid-Tumor on the Foot. J.
Invertebr. Pathol., 9(4): 577-579. 1967.

- RTLA 137. Freshwater mussel, Margaritifera margaritifera
Material: Two slides; 1 block
Diagnosis: Polypoid tumor on foot
Submitter: G. B. Pauley
Reprint: Pauley, Gilbert B. A Disease of the Freshwater Mussel,
Margaritifera margaritifera. J. Invertebr. Pathol.,
12(3): 321-328. 1968.
- RTLA 138. Freshwater mussel, Margaritifera margaritifera
Material: One slide; 2 blocks
Diagnosis: Polypoid tumor on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 140]
- RTLA 139. Freshwater mussel, Margaritifera margaritifera
Material: One slide; 1 block
Diagnosis: Polypoid tumor on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 140]
- RTLA 140. Freshwater mussel, Anodonta oregonensis
Material: One slide
Diagnosis: Incipient polypoid tumors on foot
Submitter: G. B. Pauley
Reprint: Pauley, Gilbert. A Critical Review of Neoplasia and
Tumor-Like Lesions in Mollusks. Natl. Cancer Inst.
Monogr. 31: 509-539. 1969.
- RTLA 141. Freshwater mussel, Anodonta californiensis
Material: Three slides
Diagnosis: Edematous hyperplasia of gill
Submitter: G. B. Pauley
Reprint: [see RTLA 140]
- RTLA 142. Freshwater mussel, Anodonta californiensis
Material: Six slides
Diagnosis: (1) Polypoid tumor on foot
 (2) Hyperplasia on gill
Submitter: G. B. Pauley
Reprint: [see RTLA 140]
- RTLA 143. Freshwater mussel, Anodonta californiensis
Material: One slide; 4 blocks
Diagnosis: Incipient polypoid tumors on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 38]
- RTLA 144. Freshwater mussel, Anodonta californiensis
Material: Seven slides including 3 autoradiographs
Diagnosis: Polypoid tumors on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 38]

RTLA 145. Freshwater mussel, Anodonta californiensis

Material: Two slides
Diagnosis: Polypoid tumors on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 38]

RTLA 146. Freshwater mussel, Margaritifera margaritifera

Material: Nine slides; 9 blocks
Diagnosis: Edematous cysts "spongy disease"
Submitter: G. B. Pauley
Reprint: [see RTLA 137]

RTLA 147. Soft-shell clam, Mya arenaria

Material: Three slides
Diagnosis: Fungiform smooth muscle tumor on siphon
Submitter: G. B. Pauley and T. Cheng
Reprint: Pauley, Gilbert B. and Thomas C. Cheng. A Tumor on the Siphons of a Soft-Shell Clam, Mya arenaria. J. Invertebr. Pathol., 11(3): 504-506. 1968.

RTLA 148. Freshwater mussel, Gonidea angulata

Material: Four slides; 2 blocks
Diagnosis: Polypoid tumor on foot
Submitter: G. B. Pauley
Reprint: [see RTLA 140]

RTLA 149. Freshwater mussel, Gonidea angulata

Material: Five slides; 1 block
Diagnosis: Polypoid tumor on foot with collagenous stroma
Submitter: G. B. Pauley
Reprint: [see RTLA 140]

RTLA 150. American oyster, Crassostrea virginica

Material: One paraffin block; 9 slides
Diagnosis: Mesenchymal neoplasms; possibly reticulum cell sarcomas
Submitter: J. A. Couch
Reprint: Couch, J. A. Sarcoma-Like Disease in a Single Specimen of the American Oyster. In: Comparative Leukemia Research 1969, Bibl. haemat., No. 36, R. M. Dutcher (ed.), p. 647 (Karger, Basel/München/Paris/New York 1970). (Abstract).

RTLA 151. Sydney rock oyster, Crassostrea commercialis

Material: Five slides; 1 photograph
Diagnosis: Epithelial papilloma
Submitter: P. H. Wolf
Reprint: [see RTLA 107]

RTLA 152. Sydney rock oyster, Crassostrea commercialis

Material: Three slides; 2 paraffin blocks; 1 photograph
Diagnosis: Epithelial papilloma
Submitter: P. H. Wolf
Reprint: [see RTLA 107]

RTLA 153. Pacific oyster, Crassostrea gigas

Material: Two slides

Diagnosis: Mesenchymal tumor

Submitter: A. K. Sparks

Reprint: Sparks, Albert K., Gilbert B. Pauley, Richard R. Bates, and Clyde S. Sayce. A Mesenchymal Tumor in a Pacific Oyster, Crassostrea gigas (Thunberg). *J. Insect Pathol.*, 6(4): 448-452. 1964.RTLA 154. Pacific oyster, Crassostrea gigas

Material: Two slides

Diagnosis: Fecal impaction; possibly due to congenital stenosis

Submitter: A. K. Sparks

Reprint: Sparks, Albert K., Gilbert B. Pauley, Richard R. Bates, and Clyde S. Sayce. A Tumorlike Fecal Impaction in a Pacific Oyster, Crassostrea gigas (Thunberg). *J. Insect Pathol.*, 6(4): 453-456. 1964.RTLA 155. Littleneck clam, Venerupis staminea

Material: One slide

Diagnosis: Infestation with larval cestode, Echeneibothrium sp.

Submitter: A. K. Sparks

Reprint: Sparks, Albert K. and Kenneth K. Chew. Gross Infestation of the Littleneck Clam, Venerupis staminea, with a Larval Cestode (Echeneibothrium sp.). *J. Invertebr. Pathol.*, 8(3): 413-416. 1966.RTLA 156. Smallmouth bass, Micropterus dolomieu

Material: One excised tumor; 4 slides; 4 photographs

Diagnosis: Fibrovascular tumor; lymphangioma (?); mesothelioma (?)

Submitter: W. G. Yoder

RTLA 157. Pacific cod, Gadus macrocephalus

Material: Gross specimens; 21 slides; 7 photographs

Diagnosis: Adenoma of parabranchial body -- tentative diagnosis based on poorly fixed tissue

Submitter: C. D. Levings

RTLA 158. Earthworm, Lumbricus terrestris

Material: Fourteen slides

Diagnosis: Epithelioma-like lesion following cold injury

Submitter: H. I. Firminger

Reprint: Firminger, H. I., Sandra Antoine, and Elijah Adams. Epithelioma-Like Lesion in Lumbricus terrestris After Cold Injury. *Natl. Cancer Inst. Monogr.* 31: 645-653. 1969.RTLA 159. Planarian, Dugesia dorotocephala

Material: Seven slides

Diagnosis: "Curly-tail disease" -- intranuclear inclusion bodies in some neoblasts are suspected as being viruses

Submitter: C. J. Dawe

Reprint: Dawe, Clyde J. Invertebrate Animals in Cancer Research. *GANN Monogr.* 5: 45-55. 1968.

RTLA 160. Sydney rock oyster, Crassostrea commercialis

Material: One gross specimen
Diagnosis: Papillary epithelioma of mantle
Submitter: P. H. Wolf
Reprint: [see RTLA 107]

RTLA 161. Sydney rock oyster, Crassostrea commercialis

Material: One gross specimen; 1 photograph
Diagnosis: Papillary epithelioma of mantle
Submitter: P. H. Wolf
Reprint: [see RTLA 107]

RTLA 162. Sydney rock oyster, Crassostrea commercialis

Material: One gross specimen; 1 photograph
Diagnosis: Papillary epithelioma of mantle
Submitter: P. H. Wolf
Reprint: [see RTLA 107]

RTLA 163. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen; 3 slides; 8 photographs
Diagnosis: (1) lymphocystis
 (2) dermal sarcoma
Submitter: R. Walker
Reprint: Walker, Roland. Lymphocystis Warts and Skin Tumors
of Walleyed Pike. Rensselaer Rev. Grad. Studies, No. 14,
pp. 1-5, Rensselaer Polytechnic Institute, Troy, N.Y.
1958.

RTLA 164. Walleye, Stizostedion vitreum vitreum

Material: Three paraffin blocks; 2 slides
Diagnosis: Epithelioma
Submitter: R. Walker
Reprints: Walker, Roland. Virus Associated with Epidermal
Hyperplasia in Fish. Natl. Cancer Inst. Monogr. 31:
195-207. 1969.

Walker, Roland. Epidermal Hyperplasia in Fish: Two
Types Without Visible Virus. Natl. Cancer Inst. Monogr.
31: 209-213. 1969.

RTLA 165. English sole, Parophrys vetulus

Material: Four groups of gross specimens
Diagnosis: Cuticular papillomas
Submitter: R. C. Cooper and C. A. Keller
Reprint: Cooper, Robert C. and Carl A. Keller. Epizootiology of
Papillomas in English Sole, Parophrys vetulus. Natl.
Cancer Inst. Monogr. 31: 173-185. 1969.

RTLA 166. Ramirez's dwarf cichlid, Apitistogramma ramirezi

Material: One gross specimen; 5 photographs; 3 slides
Diagnosis: Lymphocystis
Submitter: R. Kanazawa

RTLA 167. Eastern coral snake, Micruurus fulvius fulvius

Material: Two pieces of tissue; 6 photographs; 12 slides

Diagnosis: Acute necrotizing pneumonitis with multiple small abscesses

Submitter: W. E. Haast

RTLA 168. Sea hare, Aplysia californica

Material: Gross specimen; 28 slides

Diagnosis: Obstructed albumen gland (?)

Submitter: D. O. Carpenter

RTLA 169. Earthworm, Lumbricus sp.

Material: One gross specimen; 6 photographs; 10 slides

Diagnosis: Supernumerary clitellum

Submitter: E. Holland

RTLA 170. Skipjack tuna, Euthynnus pelamis

Material: Gross specimen; 5 photographs; 3 slides

Diagnosis: Hematoma; no infection; blood cells broken down indicating rather old condition

Submitter: J. C. Marr

RTLA 171. American oyster, Crassostrea virginica

Material: Six panels with 43 specimens of shells with abnormalities of growth and malformations in the shell; 1 photograph

Diagnosis: Panel 1. Normal shells

Panel 2. Shift in direction of the principle axis of growth

Panel 3. Repair of shell injuries

Panel 4. Formation of cysts

Panel 5. Massive calcite deposits and pearl-like structures

Panel 6. Abnormal growth of right valve

Submitter: P. S. Galtsoff

Reprint: Galtsoff, Paul S. Anomalies and Malformations in the Shells of Crassostrea virginica. Natl. Cancer Inst.

Monogr. 31: 575-580. 1969.

RTLA 172. Leopard frog, Rana pipiens

Material: Twelve slides; 1 gross specimen; 1 photograph; 1 summary sheet of research program; and 1 list of frog kidney tumor specimens available at Trinity College, Washington, D.C.

Diagnosis: Renal adenocarcinoma

Submitter: G. S. King

RTLA 173. Angelfish, Pterophyllum scalare

Material: Two slides

Diagnosis: Lymphocystis

Submitter: M. M. Sigel

RTLA 174. Moray

Material: Four slides

Diagnosis: Granulomatous inflammatory reaction; etiology unknown

Submitter: M. M. Sigel

RTLA 175. Conch

Material: Seven slides
Diagnosis: Indeterminant
Submitter: M. M. Sigel

RTLA 176. Bloater, Coregonus hoyi

Material: Two fish (dressed); 11 photographs; 11 slides
Diagnosis: Myxomatous lesion induced by unidentified organism
Submitter: L. N. Allison

RTLA 177. White sucker, Catostomus commersoni

Material: One gross animal; 2 photographs
Diagnosis: Boil-like lesion containing protozoan parasites;
myxosporida suspected
Submitter: R. D. Schick

RTLA 178. Discus fish, Sympodus discus

Material: One gross specimen; 3 photographs
Diagnosis: Inflammation and necrosis in muscle due to mixed infection
of bacteria and protozoa (microsporida suspected)
Submitter: R. D. Schick

RTLA 179. Iguana iguana

Material: One gross autopsy specimen; 5 photographs including
x-ray; 2 slides
Diagnosis: Osteodystrophy
Submitter: R. B. Northway

RTLA 180. Corn earworm, Heliothis zea

Material: Five 35 mm slides of histology sections from various organs
Diagnosis: Infection with nuclear polyhedrosis virus of Trichoplusia ni
Submitter: G. E. Cantwell

RTLA 181. Cabbage looper, Trichoplusia ni

Material: Six 35 mm slides of histology sections from various organs
Diagnosis: T. ni with 2 polyhedrosis viruses
Submitter: G. E. Cantwell

RTLA 182. Zebra caterpillar, Ceramica picta

Material: Four 35 mm slides of histology sections from various organs
Diagnosis: Nuclear polyhedrosis infection
Submitter: G. E. Cantwell

RTLA 183. Silkworm, Bombyx mori

Material: One 35 mm slide
Diagnosis: Cytoplasmic polyhedrosis virus
Submitter: G. E. Cantwell

RTLA 184. Corn earworm, Heliothis zea

Material: One 35 mm slide
Diagnosis: Cytoplasmic virus of gut epithelium
Submitter: G. E. Cantwell

RTLA 185. Saltmarsh caterpillar, Estigmene acrea

Material: One 35 mm slide

Diagnosis: Granulosis virus of fat body

Submitter: G. E. Cantwell

RTLA 186. Fir-shoot roller, Choristoneura murinana

Material: One 35 mm slide

Diagnosis: Granulosis virus of fat body cells of fourth instar larva

Submitter: G. E. Cantwell

RTLA 187. Cockchafer, Meleontha sp.

Material: One 35 mm slide

Diagnosis: Nosema disease

Submitter: G. E. Cantwell

RTLA 188. Larch sawfly, Pristiphora erichsonii

Material: Two 35 mm slides

Diagnosis: Bacillus cereus penetrating the gut in the vicinity of point of attachment of hindgut to posterior portion of midgut

Submitter: G. E. Cantwell

RTLA 189. European cockchafer, Meleontha sp.

Material: One 35 mm slide

Diagnosis: Spores of Bacillus popilliae in the blood

Submitter: G. E. Cantwell

RTLA 190. Silkworm, Bombyx mori

Material: Two 35 mm slides

Diagnosis: Effects of crystals of B. thuringiensis on gut 15 minutes after feeding and change in the midgut 55 minutes after crystal ingestion

Submitter: G. E. Cantwell

RTLA 191. Crane fly, Tipula paludosa

Material: One 35 mm slide

Diagnosis: Fat body cells of larva infected with Rickettsiella tipulae

Submitter: G. E. Cantwell

RTLA 192. Mediterranean flour moth, Anagasta kuehniella

Material: One 35 mm slide

Diagnosis: Section of A. kuehniella two days after infection by B. cereus

Submitter: G. E. Cantwell

RTLA 193. Rhinoceros beetle, Oryctes rhinoceros

Material: One 35 mm slide

Diagnosis: Beauveria tenella infection

Submitter: G. E. Cantwell

RTLA 194. Oryctes nasicornis

Material: One 35 mm slide

Diagnosis: Beauveria tenella infection

Submitter: G. E. Cantwell

RTLA 195. Rhinoceros beetle, Oryctes rhinoceros

Material: One 35 mm slide

Diagnosis: Metarrhizium anisopliae infection

Submitter: G. E. Cantwell

RTLA 196. Larch sawfly, Pristiphora erichsonii

Material: One 35 mm slide

Diagnosis: Normal larch sawfly

Submitter: G. E. Cantwell

RTLA 197. Coho salmon, Oncorhynchus kisutch

Material: One gross specimen; photographs; 3 slides

Diagnosis: Fibrolipoma

Submitter: L. N. Allison

RTLA 198. Drosophila melanogaster

Material: Eleven slides

Diagnosis: Five slides -- st tubw adults

Three slides -- plus wild type adults

Three slides -- larval cross sections

Submitter: J. H. Sang

Reprint: Sang, James H. Biochemical Basis of Hereditary Melanotic Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31: 291-301. 1969.

RTLA 199. Guppy, Poecilia reticulata

Material: Three whole specimens

Diagnosis: Teratoid anomalies

Submitter: R. Wenk

RTLA 200. Giant toad, Bufo marinus

Material: One live toad

Diagnosis: Lymphatic cyst on top of head

Submitter: C. Gans

RTLA 201. Red-eared turtle, Chrysemys scripta elegans

Material: One live turtle

Diagnosis: Epidermoid cyst under left eye with bacterial infection

Submitter: W. Frair

RTLA 202. Sockeye salmon, Oncorhynchus nerka

Material: One adult salmon

Diagnosis: Fibroma

Submitter: N. Boyce

RTLA 203. Coho salmon, Oncorhynchus kisutch

Material: One adult coho salmon; 3 photographs

Diagnosis: Lymphosarcoma

Submitter: N. Boyce

RTLA 204. Mummichog, Fundulus heteroclitus

Material: Six slides

Diagnosis: Fibroma

Submitter: P. P. Yevich

RTLA 205. American bullfrog, Rana catesbeiana

Material: One slide

Diagnosis: Acute and chronic inflammation associated with bacterial colonies involving liver and muscle

Submitter: E. L. Cooper and B. S. Baculi

RTLA 206. Western toad, Bufo boreas

Material: One slide

Diagnosis: Fibroma

Submitter: E. L. Cooper and B. S. Baculi

RTLA 207. Frog, Rana montezumae

Material: One slide

Diagnosis: Splenic infarcts

Submitter: E. L. Cooper and B. S. Baculi

RTLA 208. Shrimp, Palaemon sp.

Material: One shrimp

Diagnosis: Parasitized by an isopod, Bopyrus sp.

Material: G. O'Conor

RTLA 209. Edible shrimp, Penaeus aztecus

Material: Nine gross specimens; 5 normal controls

Diagnosis: Inflammation, repair and regeneration

Submitter: R. A. Neal

RTLA 210. Shrimp, Penaeus setiferus

Material: Nine gross specimens; 5 normal controls

Diagnosis: Inflammation, repair and regeneration

Submitter: R. A. Neal

RTLA 211. Praying mantis

Material: Wet tissue; 10 slides

Diagnosis: Granulomas

Submitter: G. E. Cosgrove

RTLA 212. Bull shark, Carcharhinus leucas

Material: Gross specimen; 20 slides

Diagnosis: Fibroma

Submitter: M. Walker, G. Zubrod, and P. W. Gilbert

RTLA 213. Longnose sucker, Catostomus catostomus

Material: Three whole fish

Diagnosis: Normal

Submitter: R. W. Hinz

RTLA 214. Firebellied newt, Cynops pyrrhogaster

Material: Six slides; 1 photograph

Diagnosis: Nephroblastoma

Submitter: P. Zwart

Reprint: Zwart, P. A Nephroblastoma in a Fire-bellied Newt, Cynops pyrrhogaster. Cancer Res., 30: 2691-2694. 1970.

RTLA 215. Pacific oyster, Crassostrea gigas

Material: Ten slides; 4 blocks

Diagnosis: Probable epithelioma of the mantle with conchiolin formation

Submitter: G. B. Pauley and C. S. Sayce

Reprint: Pauley, Gilbert B. and Clyde S. Sayce. An Invasive Epithelial Neoplasm in a Pacific Oyster, Crassostrea gigas. J. Natl. Cancer Inst., 49(3): 897-902. 1972.RTLA 216. Brook trout, Salvelinus fontinalis

Material: Two slides

Diagnosis: Lymphosarcoma

Submitter: C. E. Dunbar

Reprint: Dunbar, Clarence E. Lymphosarcoma of Possible Thymic Origin in Salmonid Fishes. Natl. Cancer Inst. Monogr. 31: 167-171. 1969.RTLA 217. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Nephroblastoma

Submitter: C. E. Dunbar

Reprint: [see RTLA 62]

RTLA 218. Croaker

Material: Gross specimen; 3 photographs

Diagnosis: Exostosis versus osteoma

Submitter: J. P. Summerour

RTLA 219. Gudgeon, Gobio gobio

Material: Five slides; one 35 mm slide

Diagnosis: Squamous cell carcinoma

Submitter: L. E. Mawdesley-Thomas

Reprint: Mawdesley-Thomas, Lionel E. and David Bucke. Squamous Cell Carcinoma in a Gudgeon (Gobio gobio, L.). Pathol. Vet., 4: 484-489. 1967.RTLA 220. Bream, Abramis brama

Material: Four slides; two 35 mm slides

Diagnosis: Lipoma

Submitter: L. E. Mawdesley-Thomas

Reprint: Mawdesley-Thomas, Lionel E. and D. Bucke. A Lipoma in a Bream (Abramis brama L.) Vet. Rec., 82: 673-674. 1968.RTLA 221. Roach, Rutilus rutilus

Material: Four slides

Diagnosis: Fish pox

Submitter: L. E. Mawdesley-Thomas

Reprint: Mawdesley-Thomas, Lionel E. and David Bucke. Fish Pox in the Roach (Rutilus rutilus L.). Vet. Rec., 81(2): 56-57. 1967.RTLA 222. Mummichog, Fundulus heteroclitus

Material: Four slides and blocks

Diagnosis: Granulomas

Submitter: P. P. Yevich

RTLA 223. Sydney rock oyster, Crassostrea commercialis

Material: Two photographs; 6 slides

Diagnosis: Papilloma of mantle

Submitter: P. H. Wolf

Reprint: Wolf, Peter H. Unusually Large Tumor in a Sydney Rock Oyster. J. Natl. Cancer Inst., 46(5): 1079-1084. 1971.

RTLA 224. American oyster, Crassostrea virginica

Material: Thirteen slides

Diagnosis: Hematopoietic neoplasms

Submitter: C. A. Farley

Reprint: Farley, C. Austin. Probable Neoplastic Disease of the Hematopoietic System in Oysters, Crassostrea virginica and Crassostrea gigas. Natl. Cancer Inst. Monogr. 31: 541-555. 1969.

RTLA 225. Pacific oyster, Crassostrea gigas

Material: Three slides

Diagnosis: Hematopoietic neoplasms

Submitter: C. A. Farley

Reprint: [see RTLA 224]

RTLA 226. Broad-banded copperhead, Agiistrodon contortrix laticinctus

Material: One piece of lung tissue; 3 photographs

Diagnosis: Excessive mucus and sloughing in bronchus with gram positive bacterial infection; satisfactory cause of death not determined

Submitter: W. E. Haast

RTLA 227. Odonata (dragonfly) naiads

Material: Four specimens

Diagnosis: Subcutaneous lithiasis; etiology unknown

Submitter: H. R. Hepburn

RTLA 228. Atlantic eel, Anguilla vulgaris

Material: Gross specimens; 10 slides; photographs

Diagnosis: Epithelial papillomas

Submitter: B. F. Deys

Reprint: Deys, B. F. Papillomas in the Atlantic Eel, Anguilla vulgaris. Natl. Cancer Inst. Monogr. 31: 187-193. 1969.

RTLA 229. Drosophila melanogaster

Material: A live strain

Diagnosis: tuB₃

Submitter: C. Barigozzi

Reprint: Barigozzi, C. Genetic Control of Melanotic Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31: 277-290. 1969.

RTLA 230. Blacktail platy, Xiphophorus sp., probably a hybrid between X. maculatus and X. helleri

Material: Twenty gross specimens; photographs

Diagnosis: Melanoma with invasion of underlying muscle

Submitter: I. L. Gorman

RTLA 231. Indigo snake, Drymarchon corais couperi

Material: One piece of tissue; photographs

Diagnosis: Granuloma with totally necrotic center

Submitter: Unknown

RTLA 232. Red-spotted newt, Notophthalmus viridescens

Material: Two slides; blocks

Diagnosis: Nematode parasite in pancreas

Submitter: G. E. Cosgrove

RTLA 233. Hellbender, Cryptobranchus alleganiensis

Material: One slide; two 35 mm slides; 1 piece of wet tissue

Diagnosis: Adenoma of seminiferous epithelium

Submitter: G. E. Cosgrove

Reprint: Cosgrove, G. E. and J. C. Harshbarger. Testicular Tumor in a Salamander. *J. Am. Vet. Med. Assoc.*, 159(5): 582. 1971.

RTLA 234. Iguana iguana

Material: Three 35 mm slides; blocks; 1 slide

Diagnosis: Chronic abcess of the subcutaneous tissue of the left mandibular area; culture of abcess contents positive for Klebsiella sp.

Submitter: G. E. Cosgrove

RTLA 235. Blue mussel, Mytilus edulis

Material: Three slides

Diagnosis: Lymphoma

Submitter: C. A. Farley

Reprint: Farley, C. Austin. Sarcomatoid Proliferative Disease in a Wild Population of Blue Mussels (Mytilus edulis). *J. Natl. Cancer Inst.*, 43(2): 509-516. 1969.

RTLA 236. Slatepencil urchin, Heterocentrotus mammillatus

Material: Sea-urchin spine with appendage

Diagnosis: Developmental anomaly

Submitter: A. C. Smith

RTLA 237. Sea hare, Aplysia californica

Material: One gross specimen

Diagnosis: Granuloma -- caused by a fungus

Submitter: D. O. Carpenter

RTLA 238. Claw-footed toad, Xenopus laevis

Material: Two gross kidney specimens

Diagnosis: (1) Gastro-pancreatic carcinoma

(2) Kidney carcinoma plus tubercles containing acid-fast bacteria

Submitter: E. Elkan

Reprint: Elkan, E. A Spontaneous Anaplastic Intestinal Metastasis in Carcinoma in a South African Clawed Toad (Xenopus laevis Daudin). *J. Pathol. Bacteriol.*, 100(3): 205-207. 1970.

RTLA 239. Caecilian, Caecilia tentaculata

Material: Gross specimen of soft tissue under tongue
Diagnosis: Normal
Submitter: E. H. Taylor

RTLA 240. Half-toed gecko, Hemidactylus frenatus

Material: One gross specimen; photographs
Diagnosis: Infectious granuloma with necrotic center containing bacteria
Submitter: R. G. Tuck, Jr.

RTLA 241. American shad, Alosa sapidissima

Material: Four slides; 2 photographs
Diagnosis: Chronic inflammatory reaction, repair and scarring at the site of an old wound
Submitter: R. W. Warner
Reprint: Warner, Ronald W. and Stanley C. Katkansky. An Inflammatory Lesion in an American Shad, Alosa sapidissima. J. Fish. Res. Board Can., 27(1): 191-193. 1970.

RTLA 242. Sockeye salmon, Oncorhynchus nerka

Material: One adult salmon
Diagnosis: Rhabdomyosarcoma
Submitter: N. Boyce

RTLA 243. Blue crab, Callinectes sapidus

Material: One right chela
Diagnosis: Cuticular cyst at joint of claw
Submitter: J. A. Couch

RTLA 244. Freshwater clam, Strophitus undulatus

Material: One clam
Diagnosis: Glocchidia
Submitter: W. Lener

RTLA 245. Planarian, Dactyligera muscula

Material: Six gross specimens
Diagnosis: Anomalous regeneration; etiology unknown
Submitter: R. Kenk

RTLA 246. Malayan pit viper, Caloselasma rhodostoma

Material: Two slides
Diagnosis: Oral sepsis; phlegmonous cellulitis
Submitter: E. Elkan

RTLA 247. Guppy, Poecilia reticulata

Material: Gross specimens
Diagnosis: Multiple granulomas of liver; possible degeneration of spinal cord
Submitter: R. Wenk

RTLA 248. Chinook salmon, Oncorhynchus tshawytscha

Material: Head of one fish
Diagnosis: Fibroameloblastoma
Submitter: J. H. Wales

RTLA 249. Drosophila melanogaster, tu(83.9)bw strain
Material: Gross specimens; slides; photographs
Diagnosis: (1) Normal
 (2) Melanotic tumors
Submitter: J. H. Sang
Reprint: Sang, James H. Biochemical Basis of Hereditary Melanotic Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31: 291-301. 1969.

RTLA 250. Earthworm, Lumbricus sp.
Material: Gross specimens
Diagnosis: Granulomatous reaction to parasite (nematode suspected)
Submitter: E. Holland

RTLA 251. Photuris sp.
Material: Eleven gross specimens
Diagnosis: Incomplete; variety of teratologies, parasitic and microbial infections
Submitter: M. McLean

RTLA 252. Earthworm, Lumbricus sp.
Material: One gross specimen
Diagnosis: Hyperplasia and displasia of clitellar epithelium in response to nematode parasite
Submitter: E. Holland

RTLA 253. Darkblotched rockfish, Sebastes crameri
Material: One slide; 2 lantern slides
Diagnosis: Follicular and papillary carcinoma of the thyroid
Submitter: M. Katz

RTLA 254. Lingcod, Ophiodon elongatus
Material: One slide; 2 lantern slides
Diagnosis: Lymphocystis
Submitter: M. Katz

RTLA 255. Herring
Material: One slide
Diagnosis: Hydatidiform cysts of cyclophyllid tapeworms
Submitter: M. Katz

RTLA 256. Sucker, Deltistes sp.
Material: Three slides
Diagnosis: Subcutaneous fibroma
Submitter: M. Katz

RTLA 257. Bloater, Coregonus hoyi
Material: One gross specimen
Diagnosis: Olfactory neuroepithelioma
Submitter: L. N. Allison

RTLA 258. Coho salmon, Oncorhynchus kisutch
Material: One slide; 2 lantern slides
Diagnosis: Neurofibroma
Submitter: M. Katz

RTLA 259. Chinook salmon, Oncorhynchus tshawytscha

Material: Photographs

Diagnosis: Fibroameloblastomas

Submitter: M. Katz

Reprint: Schlumberger, Hans G. and Max Katz. Odontogenic Tumors of Salmon, Cancer Res., 16(4): 369-370. 1956.

RTLA 260. Fish

Material: Three photographs; one gross specimen

Diagnosis: Fibroma

Submitter: M. Katz

RTLA 261. Coho salmon, Oncorhynchus kisutch

Material: One x-ray of jaw

Diagnosis: Ossifying fibroma or osteogenic sarcoma

Submitter: M. Katz

RTLA 262. Earthworm, Lumbricus sp.

Material: One gross specimen

Diagnosis: Nematode infection

Submitter: E. Holland

RTLA 263. Caecilian, Caecilia tentaculata

Material: Two vials of tissue

Diagnosis: Hemangioma

Submitter: E. H. Taylor

RTLA 264. Dover sole, Microstomus pacificus

Material: Two whole specimens and tissue from another specimen

Diagnosis: Epidermal papilloma with chronic sub-epithelial inflammatory reaction

Submitter: J. S. Laurie

RTLA 265. Ratfish, Hydrolagus colliei

Material: Four claspers

Diagnosis: Inflammatory cells and fibrous tissue in response to fungal infection

Submitter: J. S. Laurie

RTLA 266. Flying lizard, Draco

Material: One gross specimen

Diagnosis: Presumptive subdermal infectious granuloma

Submitter: S. Campden-Main

RTLA 267. Cutthroat trout, Salmo clarki

Material: Three slides

Diagnosis: Leukemia

Submitter: C. E. Smith

Reprint: Smith, Charlie E. An Undifferentiated Hematopoietic Neoplasm with Histologic Manifestations of Leukemia in a Cutthroat Trout (Salmo clarki). J. Fish. Res. Board Can., 28(1): 112-113. 1971.

RTLA 268. Coho salmon, Oncorhynchus kisutch

Material: Viscera

Diagnosis: Neurofibroma or neurilemmoma

Submitter: L. Margolis

RTLA 269. Apple snail, Ampullarius australis

Material: One slide; 1 photograph

Diagnosis: Adenomatous neoplasm associated with an inflammatory reaction

Submitter: K. Krieg

Reprint: Krieg, K. Ampullarius australis d'Orbigny (Mollusca, Gastropoda) as Experimental Animal in Oncological Research. A Contribution to the Study of Cancerogenesis in Invertebrates. Neoplasma 19(1): 41-49. 1972.

RTLA 270. Freshwater planarian, Planaria dactyligera musculosa

Material: Three gross specimens; 1 block containing 3 planarians

Diagnosis: Anomalous regeneration; etiology unknown

Submitter: R. Kenk

RTLA 271. South American red-eared turtle, Chrysemys scripta callirostris (one specimen; Common red-eared turtle, Chrysemys scripta elegans (2 specimens)

Material: Three live specimens

Diagnosis: Dermatitis

Submitter: A. Graves

RTLA 272. Red-spotted newt, Notophthalmus viridescens

Material: One gross specimen; 2 photographs

Diagnosis: Muscle disintegration due to nerve injury or mesenchymal cell neoplasm

Submitter: E. R. Burns

Reprint: Burns, E. Robert and Harold J. White. A Spontaneous Mesenchymal Cell Neoplasm in the Adult Newt, Diemictylus viridescens. Cancer Res., 31: 826-829. 1971.

RTLA 273. Bloater, Coregonus hoyi

Material: Three gross specimens

Diagnosis: Myxomatous lesion induced by unidentified organism

Submitter: L. N. Allison

RTLA 274. Praying mantis

Material: Four slides; 2 gross specimens

Diagnosis: Black areas on cuticle

Submitter: G. E. Cosgrove

RTLA 275. Timber rattlesnake, Crotalus horridus horridus

Material: Two slides; blocks

Diagnosis: (1) Spleen: reticuloendothelial hyperplasia
 (2) Intestines: acute ulcerative enteritis
 (3) Wall of stomach and intestines: granuloma (parasitic); one contains larval cestode; one contains nematode

Submitter: G. E. Cosgrove

- RTLA 276. Guppy (blue delta strain), Poecilia reticulata
Material: Thirteen gross specimens; 23 slides
Diagnosis: Acute bacterial infection with multiple granulomas
in the mesentary and pancreatic tissue
Submitter: J. G. Bennett
- RTLA 277. Channel catfish, Ictalurus punctatus
Material: Two whole fish
Diagnosis: Multiple encysted larvae of tapeworms (Cestoda),
probably of genus Proteocephalus involving visceral
serosal surface
Submitter: W. W. Tullner
- RTLA 278. Leopard frog, Rana pipiens
Material: Two slides of spleen
Diagnosis: Infectious granuloma
Submitter: D. J. Olson and E. L. Cooper
- RTLA 279. Leopard frog, Rana pipiens
Material: Two slides of tissue with parasitic lesions
Diagnosis: Granulomatous reaction to trematode parasites
Submitter: D. J. Olson and E. L. Cooper
- RTLA 280. Crayfish, Orconectes rusticus
Material: Six slides of crayfish antennal gland
Diagnosis: Uric acid crystals
Submitter: J. Hubschman
- RTLA 281. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Inflammatory lesion
Submitter: G. G. Combs
- RTLA 282. Leopard frog, Rana pipiens
Material: Six slides and photographs
Diagnosis: Lucké renal adenocarcinoma
Submitter: C. Snell
- RTLA 283. Coho salmon, Oncorhynchus kisutch
Material: One complete fish head
Diagnosis: Tissue too autolyzed for diagnosis
Submitter: L. N. Allison
- RTLA 284. Coho salmon, Oncorhynchus kisutch
Material: Gills
Diagnosis: Thyroid tumor undergoing massive necrosis
Submitter: L. N. Allison
- RTLA 285. Mosquito, Anopheles annulipes
Material: Three whole specimens; 8 slides
Diagnosis: Infection of salivary gland by Pseudomonas bacteria
Submitter: J. D. Briggs

RTLA 286. Coho salmon, Oncorhynchus kisutch

Material: A tumor from a adult female

Diagnosis: Fibroma

Submitter: D. G. MacLean

RTLA 287. Earthworm, Lumbricus sp.

Material: One worm

Diagnosis: Bacterial infection with an encapsulating granuloma reaction

Submitter: H. L. Zimmack

RTLA 288. Brown bullhead, Ictalurus nebulosus

Material: One whole fish

Diagnosis: Epithelial carcinoma; granulomas in the liver

Submitter: G. G. Combs

RTLA 289. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Epidermal papilloma

Submitter: G. G. Combs

RTLA 290. Yellow bullhead, Ictalurus natalis

Material: One fish head and viscera

Diagnosis: Injury and wound repair

Submitter: G. G. Combs

RTLA 291. Sail lizard, Hydrosaurus amboinensis

Material: Eighteen slides

Diagnosis: Leucocyte infiltrations in liver, kidneys, lungs, heart and spleen; leukemia

Submitter: P. Zwart

Reprint: Zwart, P. and J. C. Harshbarger. Hematopoietic Neoplasms in Lizards: Report of a Typical Case in Hydrosaurus amboinensis and of a Probable Case in Varanus salvator. Int. J. Cancer, 9: 548-553. 1972.

RTLA 292. Striped bass, Morone saxatilis

Material: One piece of tissue; 24 slides

Diagnosis: Nephroblastoma

Submitter: C. F. Helmboldt

Reprint: Helmboldt, C. F. and D. S. Wyand. Nephroblastoma in a Striped Bass. J. Wildl. Dis., 7: 162-165. 1971.

RTLA 293. Spiny-headed worm, Macracanthorhynchus hirudinaceus

Material: One worm

Diagnosis: Bacterial infection of damaged cuticle

Submitter: J. T. DeBell

RTLA 294. Surf clam, Spisula solidissima

Material: One clam

Diagnosis: Neuroma, neurofibroma, or fibroma

Submitter: W. Smith

RTLA 295. Pacific hagfish, Eptatretus stouti

Material: Ten slides

Diagnosis: Leucocyte infiltration in response to a fungal infection

Submitter: D. S. Linthicum

RTLA 296. Rainbow trout, Salmo gairdneri

Material: Four slides

Diagnosis: Hepatoma

Submitter: L. M. Ashley

Reprint: Ashley, Laurence M. Pathology of Fish Fed Aflatoxins and Other Antimetabolites. In: A Symposium on Diseases of Fishes and Shellfishes, Stanislas F. Snieszko (ed.), pp. 366-379. (American Fisheries Society, Special Publication No. 5, Washington 1970).

RTLA 297. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Hepatoma

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 298. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Hepatoma

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 299. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Proliferation of bile duct and tubules

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 300. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Diffuse necrosis

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 301. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Proliferation of bile duct

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 302. Rainbow trout, Salmo gairdneri

Material: One slide

Diagnosis: Acidophilic nodules

Submitter: L. M. Ashley

Reprint: [see RTLA 296]

RTLA 303. Brook trout, Salvelinus fontinalis

Material: Three slides

Diagnosis: Myxoma and granuloma

Submitter: L. M. Ashley

RTLA 304. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 305. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Reticulocytoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 306. Rainbow trout, Salmo gairdneri

Material: Three slides
Diagnosis: Normal stomach and intestine with trophozoite stages
of Entameba salmonis
Submitter: L. M. Ashley

RTLA 307. Rainbow trout, Salmo gairdneri

Material: Two slides
Diagnosis: Reticulocytoma (?)
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 308. Rainbow trout, Salmo gairdneri

Material: Two slides
Diagnosis: Advanced hepatoma with spread to caeca and pyloric
stomach
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 309. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Reticulocytoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 310. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma with cystic cholangitis and inflammation
of liver
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 311. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Adenocarcinoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 312. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 313. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Adenocarcinoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 314. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 315. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 316. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Incipient hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 317. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 318. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 319. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 320. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatitis with necrosis and hyperemia
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 321. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 322. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Incipient hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 323. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 324. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Incipient hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 325. Rainbow trout, Salmo gairdneri

Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 326. Rainbow trout, Salmo gairdneri

Material: Two slides
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

RTLA 327. Dwarf clawed frog, Hymenochirus boettgeri

Material: Seven live frogs
Diagnosis: Developmental anomalies
Submitter: R. Wenk

RTLA 328. Brown bullhead, Ictalurus nebulosus

Material: Gross specimen with oral papillary growth
Diagnosis: Epidermal papilloma; granulomas in liver
Submitter: G. G. Combs

RTLA 329. Hooked mussel, Brachidontes recurvus

Material: Two gross specimens with mantle lesions
Diagnosis: Dermal granuloma
Submitter: A. C. Smith
Reprint: Smith, Albert C. and Ronald L. Taylor. Preliminary Results of Marine Pathology Study Off the Florida Coast. Mar. Technol. Soc. J., 6(3): 51-52. 1972.

RTLA 330. Fish

Material: Cleithrum with growth
Diagnosis: Osteophyte
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 331. Sheepshead, Archosargus probatocephalus

Material: Enlarged ovaries
Diagnosis: Multiple granulomas
Submitter: A. C. Smith

RTLA 332. Sugar trout

Material: Viscera showing nodules on esophagus and stomach
Diagnosis: Multiple granulomas in response to gram negative rod-shaped bacteria
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 333. Sheepshead, Archosargus probatocephalus

Material: Caudal fins with maculae
Diagnosis: Lymphocystis
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 334. Sheepshead, Archosargus probatocephalus

Material: Liver with darkly colored wound
Diagnosis: Hemorrhage
Submitter: A. C. Smith

RTLA 335. Rock (stone?) crab

Material: Cephalothorax with white mottling.
Diagnosis: Externally infested with protozoa
Submitter: A. C. Smith

RTLA 336. Horseshoe crab, Limulus polyphemus

Material: Gross specimen with cuticular wound near left eye
Diagnosis: Indeterminant
Submitter: A. C. Smith

RTLA 337. Sea squirt

Material: Tunicate with barnacles attached
Diagnosis: Thinning or atrophy and condensation of the tunic at the juncture with the barnacles
Submitter: A. C. Smith

RTLA 338. Spotted eel

Material: Two pieces of body wall with dark (hemorrhagic) lesions
Diagnosis: Granuloma
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 339. Crab

Material: Gross specimen with soft white area on right carapace
Diagnosis: External surface infected with protozoa and bacteria
Submitter: A. C. Smith

RTLA 340. Amphioxus, Branchiostoma caribaeum

Material: Gross specimen with darkened ventral depression near head
Diagnosis: Ulcerated area
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 341. Sand dollar, Dendraster eccentricus

Material: Portion of animal with wound

Diagnosis: Pending

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 342. Goby

Material: Gross specimen with swelling around the vent

Diagnosis: Rectal fistula with prolapse of anal mucosa and herniation of pancreas

Submitter: A. C. Smith

RTLA 343. Pinfish, Lagodon rhomboides

Material: Two gross specimens with elevated white lesions on the head

Diagnosis: Parasitic cyst and inflammation

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 344. Sea hare, Aplysia dactylomela

Material: Two pieces of parapodia with white lesions

Diagnosis: No significant histologic abnormality

Submitter: A. C. Smith

RTLA 345. Starfish, Astropecten (?) sp.

Material: One gross specimen with asymmetrical color pattern

Diagnosis: No significant histologic abnormality

Submitter: A. C. Smith

RTLA 346. Colonial tunicate with sponge

Material: Gross specimen with darkening of tunic at point of attachment with sponge

Diagnosis: Tunic has collections of excretory microphages

Submitter: A. C. Smith

RTLA 347. Sponge

Material: Two pieces with coarse gray mottling

Diagnosis: No significant histologic abnormality

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 348. Sponge

Material: Two species of sponges growing together; interface surface is thinner and lighter than unshared surface

Diagnosis: Pending

Submitter: A. C. Smith

RTLA 349. Fiddler crab, Uca pugilator

Material: Gross specimen with black protrusion on third left walking leg

Diagnosis: Brown pigmentation of cuticle; probably resulting from previous injury

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 350. Fiddler crab, Uca pugilator

Material: Three gross specimens with darkened areas on ventral cuticle

Diagnosis: Thickened cuticular laminae; no explanation

Submitter: A. C. Smith

RTLA 351. Turtle (Green sea?) Chelonia mydas (?)

Material: Two enlarged lymph pumps

Diagnosis: No significant histologic abnormality

Submitter: A. C. Smith

RTLA 352. Hermit crab, Pagurus sp.

Material: Gross specimen with abdominal swellings

Diagnosis: Thickened irregular focus in exoskeleton

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 353. Pen shell

Material: Two pieces of mantle with black shiny growths

Diagnosis: Pearl forming cyst on mantle

Submitter: A. C. Smith

RTLA 354. Worm, Nereis (?) sp.

Material: Gross specimen with abrupt change in pigmentation

Diagnosis: Normal testis

Submitter: A. C. Smith

RTLA 355. Sea hare, Aplysia sp.

Material: Gross specimen with wound in parapodium

Diagnosis: Bacterial growth and necrosis under skin fold

Submitter: A. C. Smith

RTLA 356. Sea hare, Aplysia dactylomela

Material: Piece of tissue with soft elevated growth

Diagnosis: Developmental anomaly; all cells normal

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 357. Sea hare, Aplysia sp.

Material: Gross specimen with pale patches

Diagnosis: Subepidermal edema

Submitter: A. C. Smith

RTLA 358. Sea hare, Aplysia dactylomela

Material: Gross specimen with large growth on right parapodium

Diagnosis: Developmental anomaly

Submitter: A. C. Smith

Reprint: [see RTLA 329]

RTLA 359. Sea anemone

Material: Gross specimen with brown protrusions on column

Diagnosis: Normal ova

Submitter: A. C. Smith

RTLA 360. Jellyfish

Material: Piece of tissue from bell containing dark bodies
Diagnosis: No histological lesion; gross diagnosis --
canicular system obstructed with sand
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 361. Starfish (9-rayed)

Material: Ray missing a dorsal spine
Diagnosis: No histological lesion
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 362. Red grouper, Epinephelus morio

Material: Viscera showing parasites
Diagnosis: Suspected parasites are impacted pyloric caeca
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 363. Red grouper, Epinephelus morio

Material: Viscera showing parasitic worms
Diagnosis: Worms; unidentified
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 364. Black sea bass, Centropristes striata

Material: Gross specimen with soft swelling anterior to dorsal fin
Diagnosis: Collection of proteinaceous edema believed to occur
normally with the seasonal development of the testis
Submitter: A. C. Smith

RTLA 365. Sea hare, Aplysia dactylomela

Material: Gross specimen with an adhesion
Diagnosis: Developmental anomaly of parapodium
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 366. Red grouper, Epinephelus morio

Material: Five pieces of liver with darkened areas
Diagnosis: Hemorrhage
Submitter: A. C. Smith

RTLA 367. Jellyfish

Material: Pieces of bell showing abnormal wrinkling
Diagnosis: Manifestation of dehydration
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 368. Sea hare, Aplysia dactylomela

Material: Piece of parapodium with deep crypts
Diagnosis: Crypts extra deep, but otherwise normal
Submitter: A. C. Smith

RTLA 369. Colonial tunicate

Material: Piece of tissue containing dark body
Diagnosis: Parasite infection
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 370. Horseshoe crab, Limulus polyphemus

Material: Gross specimen with dark brown lesions on spine
Diagnosis: Pending
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 371. Colonial tunicate

Material: Two pieces of tissue (each from a different species of tunicate) containing foreign material
Diagnosis: Parasite infection
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 372. Colonial tunicate

Material: Pieces of tissue from several animals containing foreign material
Diagnosis: Sand suspected
Submitter: A. C. Smith

RTLA 373. Spanish mackerel, Scomberomorus maculatus

Material: Pieces of body wall from several animals with copepod parasites
Diagnosis: Acute inflammatory reaction with foreign body giant cells
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 374. Spanish mackerel, Scomberomorus maculatus

Material: Two pieces of body wall with wound
Diagnosis: Acute inflammatory reaction similar to response seen at site of copepod attachment
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 375. Spanish mackerel, Scomberomorus maculatus

Material: Heads and body walls from several animals with multiple small protrusions
Diagnosis: Cyst containing multiple spores of a parasite (coccidia)
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 376. Sheepshead, Archosargus probatocephalus

Material: Gill with enlarged filament
Diagnosis: Contains parasitic worms
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 377. Sheepshead, Archosargus probatocephalus

Material: Liver with dark region

Diagnosis: Normal liver and pancreas containing hemosiderin deposits

Submitter: A. C. Smith

RTLA 378. Timber rattlesnake, Crotalus horridus horridus

Material: Wet tissue

Diagnosis: Lymphoblastic leukemia

Submitter: L. A. Griner

RTLA 379. Rhinoceros viper, Bitis nasicornis

Material: Twelve slides

Diagnosis: Lymphosarcoma

Submitter: L. A. Griner

RTLA 380. American bullfrog, Rana catesbeiana

Material: Two slides of parathyroid glands

Diagnosis: Huge cyst containing colloid-like substance

Submitter: E. L. Cooper

RTLA 381. Drosophila melanogaster

Material: One slide

Diagnosis: Non-invasive imaginal disk tumor

Submitter: E. Gateff

Reprint: Gateff, Elisabeth and Howard A. Schneiderman. Neoplasms
in Mutant and Cultured Wild-Type Tissues of Drosophila.
Natl. Cancer Inst. Monogr. 31: 365-397. 1969.

RTLA 382. Drosophila melanogaster

Material: One slide

Diagnosis: Invasive; imaginal disks are abnormal in appearance
and size

Submitter: E. Gateff

Reprint: [see RTLA 381]

RTLA 383. Drosophila melanogaster

Material: One slide

Diagnosis: Invasive cells, ganglion mother cells, and neuroblast
cells

Submitter: E. Gateff

Reprint: [see RTLA 381]

RTLA 384. Brown bullhead, Ictalurus nebulosus

Material: Fillet with external growths

Diagnosis: Epidermal papilloma

Submitter: G. G. Combs

RTLA 385. Brown bullhead, Ictalurus nebulosus

Material: One head - one cm growth in corner of upper lip

Diagnosis: Epidermal papilloma

Submitter: G. G. Combs

- RTLA 386. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with small protrusion near left pectoral fin
Diagnosis: Epidermal (mucus cell) papilloma
Submitter: G. G. Combs
- RTLA 387. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with multiple raised lesions on dorsal and ventral surface of head
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 388. Brown bullhead, Ictalurus nebulosus
Material: Rear portion of fish with one cm growth on anal fin
Diagnosis: Early lipoma
Submitter: G. G. Combs
- RTLA 389. Brown bullhead, Ictalurus nebulosus
Material: Rear portion of fish with two protrusions anterior to rear dorsal fin
Diagnosis: Early lipoma
Submitter: G. G. Combs
- RTLA 390. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with growth in left corner of mouth on lower lip
Diagnosis: Fibrocartilage nodule; possibly caused by injury
Submitter: G. G. Combs
- RTLA 391. Brown bullhead, Ictalurus nebulosus
Material: Fish head with soft lesion in right corner of mouth on lower lip
Diagnosis: Epidermal hyperplasia
Submitter: G. G. Combs
- RTLA 392. Brown bullhead, Ictalurus nebulosus
Material: Fish head with one cm growth in floor of mouth
Diagnosis: Epidermal carcinoma
Submitter: G. G. Combs
- RTLA 393. Brown bullhead, Ictalurus nebulosus
Material: Fish head with small lesion on upper lip
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 394. Brown bullhead, Ictalurus nebulosus
Material: Fish head with lesion inside mouth in upper left corner
Diagnosis: Epithelial carcinoma
Submitter: G. G. Combs
- RTLA 395. Brown bullhead, Ictalurus nebulosus
Material: Fish head with lesion inside left corner of mouth
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 396. Brown bullhead, Ictalurus nebulosus

Material: Fish tail with small lesion on right side
Diagnosis: Fibrous hyperplasia adjacent to ulcerated area
Submitter: G. G. Combs

RTLA 397. Yellow bullhead, Ictalurus natalis

Material: Fish midsection with slightly raised lateral lesion
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 398. Brown bullhead, Ictalurus nebulosus

Material: Fish head with slightly raised dorsal lesion
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 399. Brown bullhead, Ictalurus nebulosus

Material: Fish head and thorax with multiple slightly raised lesions
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 400. Frillfin goby, Bathygobius soporator

Material: Gross specimen; growths on pectoral fin, jaw, and dorsum
Diagnosis: Hyperplastic epidermis; no invasion
Submitter: N. Rothman Feinberg

RTLA 401. Warmouth, Lepomis gulosus

Material: Gross specimen
Diagnosis: Non-diagnostic
Submitter: J. S. Laurie

RTLA 402. Chain pickerel, Esox niger

Material: Gross specimen
Diagnosis: Non-diagnostic
Submitter: J. S. Laurie

RTLA 403. Pickerel and Leopard frog hybrid, Rana palustris x pipiens

Material: Gross specimen with enlarged testis
Diagnosis: Teratocarcinoma
Submitter: J. D. Hardy, Jr.
Reprint: Hardy, J. D., Jr. and J. Gillespie. Hybridization Between
Rana pipiens and Rana palustris in a Modified Natural En-
vironment. Chesapeake Sci. (in press).

RTLA 404. White croaker, Genyonemus lineatus

Material: Gross specimen with two oral growths
Diagnosis: Epidermal papilloma
Submitter: K. P. Lindstrom

RTLA 405. White croaker, Genyonemus lineatus

Material: Gross specimen with oral growth
Diagnosis: Epidermal papilloma
Submitter: K. P. Lindstrom

RTLA 406. Yellow bullhead, Ictalurus natalis

Material: Four slides and posterior portion of fish with dermal lesion

Diagnosis: Cutaneous hemangioma or capillary hemangioma of the skin

Submitter: C. J. Dawe and B. J. Sanders

RTLA 407. Snail

Material: Gross specimen with protuberance behind head

Diagnosis: Developmental defect

Submitter: J. C. Stinson

RTLA 408. Leopard frog, Rana pipiens

Material: Two slides

Diagnosis: Hepatic necrosis

Submitter: E. Elkan

RTLA 409. Trinidad leaf frog, Phyllomedusa trinitatis

Material: One slide

Diagnosis: Renal mycosis

Submitter: E. Elkan

RTLA 410. White's tree frog, Hyla caerulea

Material: One slide

Diagnosis: Kidney showing multiple granulomas due to fungal infection; lesions contain numerous giant cells

Submitter: E. Elkan

RTLA 411. Nyctimystes kubori

Material: One slide

Diagnosis: Myxosporidiosis

Submitter: E. Elkan

RTLA 412. Nyctimystes daymanio

Material: One slide

Diagnosis: A cestode -- Myxobolus

Submitter: E. Elkan

RTLA 413. Flathead sole, Hippoglossoides elassodon

Material: Gross specimen with growth on eyed-side

Diagnosis: Epithelial papilloma; no invasion

Submitter: J. S. Laurie

RTLA 414. Clingfish, Sicyogaster maeandricus

Material: Gross specimen with abnormal area behind head

Diagnosis: Epidermal hyperplasia in response to parasitic ova

Submitter: J. S. Laurie

RTLA 415. Flathead sole, Hippoglossoides elassodon

Material: Gross specimen with large growth on tail fin

Diagnosis: Epidermal papilloma

Submitter: J. S. Laurie

RTLA 416. Ratfish, Hydrolagus colliei

Material: Tissue from region of left pectoral fin with growth;
2 slides

Diagnosis: Myxosarcoma
Submitter: J. S. Laurie

RTLA 417. Flathead sole, Hippoglossoides elassodon

Material: Gross specimen with growth on posterior part
of dorsal fin

Diagnosis: Papilloma; angioepithelial nodule
Submitter: J. S. Laurie

RTLA 418. Square-marked toad, Bufo regularis

Material: Gross specimen with soft lump posterior to left eye

Diagnosis: Granuloma containing very small gram positive rod-
shaped bacteria

Submitter: R. Crombie

RTLA 419. Dwarf-clawed frog, Hymenochirus boettgeri

Material: Twelve gross specimens with supernumerary legs

Diagnosis: Developmental anomalies

Submitter: R. Wenk

RTLA 420. Dwarf-clawed frog, Hymenochirus boettgeri

Material: Gross specimen with growth on lip

Diagnosis: Inflammatory lesion containing acid-fast bacteria

Submitter: R. Wenk

RTLA 421. Quahog, Mercenaria mercenaria or Venus mercenaria

Material: Two bottles of tissue

Diagnosis: Normal tissue

Submitter: A. C. Schmeer

RTLA 422. Spot, Leiostomus xanthurus

Material: Gross specimen with tumor at base of dorsal fin

Diagnosis: Abnormal fat deposit possibly early lipoma

Submitter: D. E. Ritchie

RTLA 423. Chinook salmon, Oncorhynchus tshawytscha

Material: Fish head with large firm dorsal growth and a small
soft growth inside operculum

Diagnosis: Large tumor -- fibrolipoma; small tumor -- parasitic
lesion containing myxosporidia -- genus Henneguya

Submitter: J. H. Wales

RTLA 424. Tokay gecko, Gekko gecko

Material: Head with raised area behind left eye

Diagnosis: Granuloma in response to Actinomyces

Submitter: B. L. Burge

RTLA 425. English sole, Parophrys vetulus

Material: Gross specimen with multiple small lesions near fins

Diagnosis: Multiple granulomas adjacent to parasitic worms

Submitter: J. S. Laurie

- RTLA 426. Flathead sole, Hippoglossoides elassodon
Material: Gross specimen with growth involving middle half of non-pigmented side
Diagnosis: Epidermal papilloma
Submitter: J. S. Laurie
- RTLA 427. Flathead sole, Hippoglossoides elassodon
Material: Gross specimen with tumor on tail fin
Diagnosis: Epidermal papilloma
Submitter: J. S. Luarie
- RTLA 428. Western diamondback rattler, Crotalus atrox
Material: Cyst-like growth from liver
Diagnosis: Granuloma due to large gram-positive rod-shaped bacteria
Submitter: J. T. Self
- RTLA 429. Western diamondback rattler, Crotalus atrox
Material: Tissue -- growth from dorsal musculature
Diagnosis: Mycotic granuloma
Submitter: J. T. Self
- RTLA 430. Coho salmon, Oncorhynchus kisutch
Material: Two pieces of tissue
Diagnosis: Sarcoma of probable peripheral nerve sheath origin
Submitter: G. R. Bell
- RTLA 431. Atlantic salmon, Salmo salar
Material: Gross specimen with growth on gills
Diagnosis: Probable thyroid carcinoma; autolysis too advanced for definitive diagnosis
Submitter: J. W. Saunders
- RTLA 432. Pencilfish, Poecilobrycon harrisoni
Material: Gross specimen with doughnut-shaped lesion around vent
Diagnosis: Anal epithelioma
Submitter: S. H. Weitzman
- RTLA 433. Goldfish, Carassius auratus
Material: Gross specimen with multiple cuticular lesions
Diagnosis: Schlumberger's neurilemmoma versus fibrosarcoma
Submitter: B. M. Levy
Reprint: Duncan, Thomas E. and James C. Harkin. Electron Microscopic Studies of Goldfish Tumors Previously Termed Neurofibromas and Schwannomas. Am. J. Pathol., 55(2): 191-202. 1969.
- RTLA 434. Goldfish, Carassius auratus
Material: Gross specimen with multiple cuticular lesions
Diagnosis: Schlumberger's neurilemmoma versus fibrosarcoma
Submitter: B. M. Levy
Reprint: [see RTLA 433]

RTLA 435. Leopard frog, Rana pipiens

Material: Two slides

Diagnosis: Teratoma

Submitter: J. C. Streett

Reprint: Streett, J. Clark. A Note on a Teratoma Occurring in the Leopard Frog. Tex. J. Sci., 16(4): 493. 1964.

RTLA 436. Staghorn coral, Acropora sp.

Material: Four specimens with large protuberances

Diagnosis: Reaction to trematode parasite suspected

Submitter: P. Glynn

RTLA 437. Leech, Placobdella parasitica

Material: Four slides

Diagnosis: Non-neoplastic papillary lesion representing injury and repair; pigment cells represent histiocytes transporting something -- presumably waste.

Submitter: G. E. Cosgrove

RTLA 438. Larva of Douglas-fir tussock moth, Hemerocampa pseudotsugata

Material: Gross specimen with supernumerary leg

Diagnosis: Developmental anomaly

Submitter: M. E. Martignoni

RTLA 439. Corn snake, Elaphe guttata guttata

Material: One paraffin block

Diagnosis: Multiple granulomas in response to fungal infection

Submitter: E. Elkan

RTLA 440. Coho salmon, Oncorhynchus kisutch

Material: Tissue from large caudal tumors

Diagnosis: Fibroma or fibrolipoma

Submitter: G. R. Bell

RTLA 441. Tiger python, Python molurus

Material: One paraffin block

Diagnosis: Adenoameloblastoma

Submitter: H. Trebbin

Reprint: Kast, A. Malignes Adenoameloblastom des Gaumens bei einer Tigerpython. Frankfurt. Z. Pathol., 77: 135-140. 1967.

RTLA 442. Starfish, Linckia multifora

Material: Two gross specimens with protuberance on rays

Diagnosis: Parasitized by gastropod mollusk

Submitter: A. C. Smith

RTLA 443. A. Homo sapiens and B. Drosophila melanogaster

Material: Thirty-one paraffin blocks; 20 photographs; 3 lantern slides; 7 microscope slides (Dr. Mary B. Stark's material)

Diagnosis: (1) human gastric carcinoma; (2) lethal-7 Drosophila imaginal disk tumor; and (3) melanotic tumors of Drosophila

Submitter: L. Stark, J. Dahl, and D. Stark

Reprint: Stark, Mary B. The Origin of Certain Hereditary Tumors in Drosophila. Am. J. Cancer, 31(2): 253-267. 1937.

RTLA 444. Bluefish, Pomatomus saltatrix

Material: Four slides

Diagnosis: Lymphangiomyelothelioma

Submitter: G. Gardner and M. M. Barry

RTLA 445. Longhorn sculpin, Myoxocephalus octodecemspinosus

Material: One slide

Diagnosis: Testis maturation arrest

Submitter: G. Gardner and M. M. Barry

RTLA 446. Longhorn sculpin, Myoxocephalus octodecemspinosus

Material: Four slides

Diagnosis: Teratocarcinoma-cystadenoma in the kidney

Submitter: G. Gardner and M. M. Barry

RTLA 447. Earthworm

Material: One slide

Diagnosis: Parasitic lesion; sporozoan suspected

Submitter: D. R. Helland

RTLA 448. Red-spotted newt, Notophthalmus viridescens

Material: Four slides

Diagnosis: Multiple granulomas in head due to ova or haplomycosis

Submitter: G. E. Cosgrove

RTLA 449. Gar, Lepisosteus sp.

Material: Five slides

Diagnosis: Oil granuloma

Submitter: B. M. Levy

RTLA 450. Coho salmon, Oncorhynchus kisutch

Material: Seven tissue samples including gills and viscera

Diagnosis: Thyroid hyperplasia

Submitter: D. R. Wolfert

RTLA 451. Coho salmon, Oncorhynchus kisutch

Material: Seven tissue samples including gills and viscera

Diagnosis: Thyroid hyperplasia

Submitter: D. R. Wolfert

RTLA 452. Coho salmon, Oncorhynchus kisutch

Material: Seven tissue samples including gills and viscera

Diagnosis: Thyroid hyperplasia

Submitter: D. R. Wolfert

RTLA 453. Coho salmon, Oncorhynchus kisutch

Material: Seven tissue samples including gills and viscera

Diagnosis: Thyroid hyperplasia

Submitter: D. R. Wolfert

RTLA 454. Coho salmon, Oncorhynchus kisutch

Material: Seven tissue samples including gills and viscera

Diagnosis: Thyroid hyperplasia

Submitter: D. R. Wolfert

- RTLA 455A. & B. Boa constrictor, Boa constrictor
 Material: One growth removed from side
 Diagnosis: Granuloma containing a mixed bacterial population
 Submitter: I. Gorman
- RTLA 456. Leopard frog, Rana pipiens
 Material: Fifty-nine black and white photomicrographs demonstrating various aspects of renal adenocarcinoma
 Submitter: W. R. Duryee
 Reprints: Duryee, William R. Factors Influencing Development of Tumors in Frogs. Ann. N. Y. Acad. Sci., 126(1): 59-84. 1965.
 Duryee, William R. Dependence of Tumor Formation in Frogs on Abnormal Nucleolar Function. In: Biology of Amphibian Tumors, Merle Mizell (ed.), pp. 82-100. Springer-Verlag: New York/Heidelberg/Berlin. 1969.
- RTLA 457. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: Deys, B. F. Papillomas in the Atlantic eel, Anguilla vulgaris. Natl. Cancer Inst. Monogr. 31: 187-194. 1969.
- RTLA 458. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: [see RTLA 457]
- RTLA 459. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: [see RTLA 457]
- RTLA 460. Iguana iguana
 Material: Four slides; two black and white photographs
 Diagnosis: Mucin producing adenocarcinoma arising in a teratoma
 Submitter: P. Zwart
- RTLA 461. Malayan monitor, Varanus salvator
 Material: Eleven slides; six black and white photographs
 Diagnosis: Lymphosarcoma
 Submitter: P. Zwart
 Reprint: Zwart, P. and J. C. Harshbarger. Hematopoietic Neoplasms in Lizards: Report of a Typical Case in Hydrosaurus amboinensis and of a Probable Case in Varanus salvator. Int. J. Cancer, 9: 548-553. 1972.
- RTLA 462. Two-flapped chameleon, Chamaeleo dilepis
 Material: Eight slides
 Diagnosis: Hyperplastic liver nodules versus well-differentiated hepatomas
 Submitter: P. Zwart

RTLA 463. Paddlefish, Polyodon spathula

Material: One piece of body wall with liver protruding; one slide
Diagnosis: Fatty liver
Submitter: C. E. Smith

RTLA 464. Rainbow trout, Salmo gairdneri

Material: Four pieces of tissue (eyes)
Diagnosis: Cataract
Submitter: C. E. Smith

RTLA 465. Corn snake, Elaphe guttata guttata

Material: Six slides
Diagnosis: Chondrosarcoma
Submitter: D. Small

RTLA 466. Guppy, Poecilia reticulata

Material: Two slides
Diagnosis: Granuloma
Submitter: D. Small

RTLA 467. Bluegill, Lepomis macrochirus

Material: One gross specimen
Diagnosis: Fungus growing on back of fish and invading dorsal muscle and spinal canal
Submitter: G. G. Combs

RTLA 468. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 469. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 470. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 471. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 472. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 473. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 474. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 475. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

RTLA 476. "Robalo" - Patagonian shorefish, Eleginops maclovinus

Material: One half of a growth on side of body wall
Diagnosis: Inflammatory lesion, possibly caused by unidentified yeast-like bodies around the periphery of the growth
Submitter: A. E. Gosztonyi

RTLA 477. & 477A. Planarian, Planaria dactyligera musculosa

Material: (477) One gross specimen with finger-shaped outgrowths extending from the dorsal and lateral sides at about the middle of the body; (477A) One gross specimen with protrusion in middle of body on dorsal side
Diagnosis: Anomalous regeneration; etiology unknown
Submitter: R. Kenk

RTLA 478. California king snake, Lampropeltis getulus

Material: Wet tissue; two color transparencies
Diagnosis: Undifferentiated sarcoma
Submitter: R. E. Reed and G. Migaki

RTLA 479. Yellowfin goby, Acanthogobius flavimanus

Material: One microscope slide; three black and white photographs
Diagnosis: Epidermal papilloma
Submitter: S. Chun

RTLA 480. Yellowfin goby, Acanthogobius flavimanus

Material: One microscope slide; three black and white photographs
Diagnosis: Epidermal papilloma
Submitter: S. Chun

RTLA 481. Doderleinia berycoides

Material: One microscope slide; three black and white photographs
Diagnosis: Lymphocystis
Submitter: S. Chun

RTLA 482. Emerald lizard, Lacerta viridis

Material: Two microscope slides; one black and white photograph
Diagnosis: Epidermal papilloma
Submitter: J. Kridler

RTLA 483. Hermit crab, Coenobita clypeatus

Material: One gross specimen with an anterior lateral protrusion on the abdomen
Diagnosis: Granulomatous reaction to a branching septate fungus
Submitter: F. A. Chace, Jr.
Reprint: Chace, Fenner A. Jr. Longevity of the West Indian Terrestrial Hermit Crab, Coenobita clypeatus (Herbst, 1791) (Decapoda, Anomura). Crustaceana, Vol. 22, Part 3. 1972.

RTLA 484. Nosema juli n. sp.

Material: Four microscope slides -- paratypes

Diagnosis: A microsporidian parasite in the millipede Diploiulus londinensis caeruleocinctus. [See Can. J. Zool., 49(9): 1279-1282, 1971]. Slides are stored in the Protozoa Collection, Division of Echinoderms and Lower Invertebrates, U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C., 20560, under the following numbers: USNM 24279-USMN 24282.

Submitter: G. G. Wilson

RTLA 485. Gray snapper, Lutjanus griseus

Material: Body wall tissue with large growth

Diagnosis: Neurofibroma

Submitter: A. G. Armitt

RTLA 486. Timber rattlesnake, Crotalus horridus horridus

Material: One paraffin block and tissue fragments

Diagnosis: Fibrosarcoma

Submitter: H. C. Orr

RTLA 487. Leopard frog, Rana pipiens

Material: One microscope slide of kidney adenocarcinoma from the Dr. Balduin Lucké collection

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 488. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Renal adenocarcinoma -- spontaneous tumor -- extremely numerous "transforming" tubules

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 489. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Lung and kidney adenocarcinoma

Submitter: W. R. Duryee

RTLA 490. Leopard frog, Rana pipiens

Material: One microscope slide of a tissue culture

Diagnosis: Renal adenocarcinoma -- large nucleolar extrusion

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 491A. Leopard frog, Rana pipiens

Material: Two microscope slides

Diagnosis: Renal adenocarcinoma -- spontaneous tumor -- "very high malignancy"

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 491B. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Papilloma on foreleg

Submitter: W. R. Duryee

RTLA 492. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Renal adenocarcinoma

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 493. Black mollie, Poecilia sp.

Material: One gross specimen

Diagnosis: Multiple granulomas; bacteria suspected

Submitter: C. W. Shockley

RTLA 494. Pacific electric ray, Torpedo californica

Material: One microscope slide

Diagnosis: Liver lesions produced by hydatid-like cysts

Submitter: A. C. Smith

Reprints: Smith, A. C. and H. F. Little. Liver Lesions Produced by Hydatid-Like Cysts in an Elasmobranch, the Electric Ray (Torpedo californica). Mar. Biol. (Berlin), 3(2): 136-142. 1969.

Smith, Albert C. and H. F. Little. Liver Lesions Produced by Hydatid-Like Cysts in an Elasmobranch, the Electric Ray, Torpedo californica. Natl. Cancer Inst. Monogr. 31: 251-254. 1969.

RTLA 495. White croaker, Genyonemus lineatus

Material: One gross specimen with growth centrally located on head just above the mouth

Diagnosis: Papilloma; granulomas in heart muscle

Submitter: K. P. Lindstrom

RTLA 496. Dover sole, Microstomus pacificus

Material: One gross specimen with "warty" lesions along the lateral line

Diagnosis: Ulcerated granulation tissue -- perhaps representing a sloughing healing stage of an epidermal papilloma

Submitter: K. P. Lindstrom

RTLA 497. Dover sole, Microstomus pacificus

Material: One gross specimen with several "whitish" growths about the eyes

Diagnosis: Angioepithelial nodules and epidermal papilloma

Submitter: K. P. Lindstrom

RTLA 498. Boa constrictor, Boa constrictor

Material: One microscope slide

Diagnosis: Epidermal papilloma

Submitter: R. B. Northway

RTLA 499. Carp, Cyprinus carpio

Material: Two pieces of tissue

Diagnosis: Neurilemmoma

Submitter: G. E. Cosgrove

RTLA 500. Florida pompano, Trachinotus carolinus

Material: Two microscope slides

Diagnosis: Thyroid hyperplasia versus low-grade follicular carcinoma

Submitter: R. E. Putz

RTLA 501. Red-spotted newt, Notophthalmus viridescens

Material: Four microscope slides

Diagnosis: Fungi (haplomycosis) versus parasite ova

Submitter: G. E. Cosgrove

RTLA 502. American oyster, Crassostrea virginica

Material: Ten microscope slides

Diagnosis: Diffuse sarcomoid neoplasm

Submitter: M. Newman

Reprint: Newman, Martin W. An Oyster Neoplasm of Apparent Mesenchymal Origin. J. Natl. Cancer Inst., 48: 237-243. 1972.

RTLA 503. Australian skink, Egernia napoleonsis

Material: One piece of liver tissue

Diagnosis: Mycobacterial granuloma

Submitter: E. Elkan

RTLA 504. Starry flounder, Platichthys stellatus

Material: One gross specimen with extremely numerous growths mostly on fins and pigmented side

Diagnosis: Granuloma in response to parasite ova plus epidermal hyperplasia

Submitter: B. F. Dey

RTLA 505. Starry flounder, Platichthys stellatus

Material: One gross specimen with growths on fins and top and bottom of head

Diagnosis: Granuloma in response to parasite ova with epidermal hyperplasia

Submitter: B. F. Dey

RTLA 506. Mexican axolotl, Ambystoma mexicanum

Material: Forty-six microscope slides

Diagnosis: Lymphoma

Submitter: L. E. DeLanney

Reprint: DeLanney, L. E. Lymphosarcoma in the Mexican Axolotl, Ambystoma mexicanum. in: Comparative Leukemia Research 1969. Bibl. haemat., No. 36, R. M. Dutcher (ed.), p. 642 (Karger, Basel/München/Paris/New York 1970).

RTLA 507. Everglade snake, Elaphe obsoleta rossalenii

Material: Two pieces of tissue; two microscope slides

Diagnosis: Malignant melanoma

Submitter: E. Elkan

RTLA 508. River jack or Rhinoceros viper, Bitis nasicornis

Material: Three microscope slides

Diagnosis: Granulocytic leukemia versus granulocytic leukemoid reaction

Submitter: R. L. Snyder

RTLA 509. Turtle, Terrapene carolina

Material: One gross specimen

Diagnosis: Bacterial granuloma

Submitter: C. Gans

RTLA 510. Bufo arenarum

Material: One microscope slide

Diagnosis: Infectious granuloma

Submitter: E. S. de Lustig

RTLA 511. Keyhole cichlid, Aequidens maronii

Material: One color transparency; one microscope slide

Diagnosis: Malignant lymphoma

Submitter: R. E. Wolke

RTLA 512. Killifish, Fundulus sp.

Material: Two gross specimens; one with a soft white protrusion
in front of left eye

Diagnosis: Microsporida infection

Submitter: A. C. Smith and R. L. Taylor

RTLA 513. Firebellied newt, Cynops pyrrhogaster

Material: One gross specimen

Diagnosis: Papilloma

Submitter: W. R. Duryee

RTLA 514. Lake trout, Salvelinus namaycush

Material: Two pieces of tissue; one microscope slide

Diagnosis: Fibroma

Submitter: L. P. E. Choquette

Reprint: Broughton, E. and L. P. E. Choquette. Subcutaneous
Fibroma in Lake Trout (Salvelinus namaycush) in Quebec.
J. Fish. Res. Board Can., 28(3): 448-449. 1971.

RTLA 515. Angelfish

Material: Two microscope slides; one color transparency

Diagnosis: Melanoma involving eye

Submitter: L. E. Mawdesley-Thomas (via D. Bucke)

Reprint: Mawdesley-Thomas, Lionel E. Neoplasia in Fish: A
Review. in: Current Topics in Comparative Pathobiology.
Vol. 1, T. C. Cheng (ed.), pp. 87-170 (Academic, New York
and London 1971).

RTLA 516. Ide or Golden orfe, Leuciscus idus

Material: One microscope slide; one color transparency

Diagnosis: Papilloma with inflammation

Submitter: D. Bucke and L. E. Mawdesley-Thomas

RTLA 517. Cod, Gadus morhua

Material: One microscope slide

Diagnosis: Malignant melanoma infiltrating muscle tissue

Submitter: L. E. Mawdesley-Thomas (via D. Bucke)

Reprint: [see RTLA 515]

RTLA 518. Brown trout, Salmo trutta

Material: One microscope slide; one color transparency
Diagnosis: Fibroma
Submitter: L. E. Mawdesley-Thomas (via D. Bucke)

RTLA 519. Haddock, Melanogrammus aeglefinus

Material: Two microscope slides; one color transparency
Diagnosis: Fibroma
Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
Reprint: [see RTLA 515]

RTLA 520. Sea morid

Material: Two microscope slides
Diagnosis: Parasitic (?) cyst
Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
Reprint: [see RTLA 515]

RTLA 521. Whiting, Merlangius merlangus

Material: Two microscope slides
Diagnosis: Fibroma
Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
Reprint: [see RTLA 515]

RTLA 522. Plaice, Pleuronectes platessa

Material: Two color transparencies
Diagnosis: Pigmented parasitic cyst
Submitter: L. E. Mawdesley-Thomas (via D. Bucke)

RTLA 523. Sandbar shark, Carcharhinus milberti

Material: Four microscope slides
Diagnosis: Reticulum cell sarcoma, spleen (only known example of a lymphoreticular or hematopoietic neoplasm in Chondrichthyes)
Submitter: R. O'Gara and V. T. Oliverio

RTLA 524. Sandbar shark, Carcharhinus milberti

Material: Fifteen microscope slides
Diagnosis: Granulomatous reaction to infection by acid-fast organism [Mycobacterium (?), Nocardia (?)]
Submitter: R. O'Gara and V. T. Oliverio

RTLA 525. Walleye, Stizostedion vitreum vitreum

Material: Two pieces of tissue; two microscope slides
Diagnosis: Granulomas in response to fungi
Submitter: C. E. Smith

RTLA 526. Chinook salmon, Oncorhynchus tshawytscha

Material: Kidney
Diagnosis: Well-differentiated nephroblastoma with lithiasis
Submitter: J. G. Hnath

RTLA 527. Rainbow trout, Salmo gairdneri

Material: Liver
Diagnosis: Hepatoma
Submitter: J. G. Hnath

RTLA 528. Plaice, Pleuronectes platessa

Material: One paraffin block

Diagnosis: Inflammation

Submitter: R. Roberts

RTLA 529. Plaice, Pleuronectes platessa

Material: One paraffin block

Diagnosis: Inflammation

Submitter: R. Roberts

RTLA 530. Coho salmon, Oncorhynchus kisutch

Material: Large tumor; one color photograph

Diagnosis: Fibroma

Submitter: G. R. Bell

RTLA 531. Tilehorned prionus -- larvae, Prionus imbricornis

Material: Twenty-nine microscope slides

Diagnosis: Multiple granulomas in hemocoele

Submitter: G. E. Cosgrove

RTLA 532. Elephant trunk snake, Acrochordus javanicus

Material: Two microscope slides; one photograph

Diagnosis: Ovarian fibroma

Submitter: P. Zwart

RTLA 533. Coho salmon, Oncorhynchus kisutch

Material: One gross specimen

Diagnosis: Osteoma

Submitter: J. G. Hnath

RTLA 534. Red-spotted newt, Notophthalmus viridescens

Material: Three microscope slides

Diagnosis: Adiaspiromycosis

Submitter: G. E. Cosgrove

RTLA 535. Enchytraeus sp.

Material: Gross specimens from colony with reduced reproduction

Diagnosis: Parasitized by nematodes

Submitter: G. E. Cosgrove

RTLA 536. Sheepshead minnow, Cyprinodon variegatus

Material: One gross specimen with seven large surface protrusions

Diagnosis: Parasitic lesions in response to Myxosporida

Submitter: B. B. Collette and M. Wiley

RTLA 537. Freshwater bivalve, Dreissena polymorpha

Material: Six microscope slides

Diagnosis: Granuloma

Submitter: B. S. Morton

RTLA 538. Black-lip pearl oyster, Pinctada margaritifera

Material: Two photographs; eight microscope slides

Diagnosis: Benign fibrovascular polyp

Submitter: T. G. Dix

Reprint: Dix, Trevor G. Two Mesenchymal Tumors in a Pearl Oyster,
Pinctada margaritifera, J. Invertebr. Pathol., 20(3): 317-
320. 1972.

RTLA 539. Firebellied newt, Cynops pyrrhogaster

Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: W. R. Duryee

RTLA 540. Firebellied newt, Cynops pyrrhogaster

Material: One gross specimen
Diagnosis: Papilloma
Submitter: W. R. Duryee

RTLA 541. Chlamys (Lyropecten) madisonius (fossil specimen)

Material: Gross specimen -- left valve only -- formation anterior to the muscle scar
Diagnosis: Blister between two layers of foliated calcite with a hole, presumably drilled by a parasite, to the surface
Submitter: M. O'Keefe

RTLA 542. Panope americana (fossil specimen)

Material: Gross specimen -- left valve only -- formation underneath the umbo
Diagnosis: Reactive deposition of presumptive conchiolin
Submitter: M. O'Keefe

RTLA 543. Panope americana (fossil specimen)

Material: Gross specimen -- right valve only -- formation anterior and below the pallial sinus
Diagnosis: Reactive deposition of presumptive conchiolin
Submitter: M. O'Keefe

RTLA 544. Panope americana (fossil specimen)

Material: Gross specimen -- left valve only -- formation just posterior to the anterior muscle scar
Diagnosis: Reactive deposition of presumptive conchiolin
Submitter: M. O'Keefe

RTLA 545. Panope americana (fossil specimen)

Material: Gross specimen -- left valve only -- formation centrally located just beneath the pallial line
Diagnosis: Reactive deposition of presumptive conchiolin
Submitter: M. O'Keefe

RTLA 546. Largetooth sawfish, Pristis perotteti

Material: Two microscope slides
Diagnosis: Wound repair
Submitter: T. B. Thorson

RTLA 547. Bull shark, Carcharhinus leucas

Material: Two microscope slides
Diagnosis: Wound repair
Submitter: T. B. Thorson

RTLA 548. South American gartersnake, Liophis sp.

Material: One piece of tissue; one color transparency
Diagnosis: Muscle degeneration due to mechanical injury
Submitter: J. A. Peters

- RTLA 549. White croaker, Genyonemus lineatus
Material: Four microscope slides; two black and white photographs
Diagnosis: Epidermal papilloma
Submitter: A. Lawson Bane, A. Thompson, K. P. Lindstrom, Dr. Pflaum
- RTLA 550. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 551. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 552. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 553. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 554. Dwarf gourami, Colias lalia
Material: One gross specimen; three black and white photographs;
two color transparencies
Diagnosis: Granuloma
Submitter: C. A. Green and C. J. Dawe
- RTLA 555. Fish
Material: Three gross specimens
Diagnosis: Death by asphyxiation
Submitter: G. C. Williams
- RTLA 556. Cobra, Naja naja
Material: One piece of pancreatic tissue and a growth found in
the peritoneal membrane
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 557. Cobra, Naja naja
Material: One piece of liver tissue
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 558. Cobra, Naja naja
Material: Two pieces of liver tissue
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 559. Cobra, Naja naja
Material: Gall bladder
Diagnosis: Granuloma
Submitter: V. Lane

RTLA 560. Cobra, Naja naja

Material: One piece of liver tissue and one piece of rectal tissue
Diagnosis: Leiomyosarcoma
Submitter: V. Lance

RTLA 561. Cobra, Naja naja

Material: Two paraffin blocks of liver tissue
Diagnosis: Granuloma
Submitter: V. Lance

RTLA 562. Crayfish, Procambarus clarkii

Material: Twenty-six vials of gross specimens; 300-400 microscope slides; 100-200 photographs
Diagnosis: Tubular cell hyperplasia in the hepatopancreas and degeneration of the antennal glands due to the effects of N-nitrosodimethylamine
Submitter: J. C. Harshbarger, G. E. Cantwell, and M. F. Stanton
Reprint: Harshbarger, J. C., G. E. Cantwell, and M. F. Stanton. Effects of N-nitrosodimethylamine on the Crayfish, Procambarus clarkii. In: Proceedings [of the] IV International Colloquium on Insect Pathology [and] The Society for Invertebrate Pathology, College Park, Maryland, 25-28 August 1970, pp. 425-430. 1970.

RTLA 563. Pecan weevil, Curculio caryae

Material: Four gross specimens (grubs)
Diagnosis: Infected with Metarrhizium fungus
Submitter: G. E. Cosgrove and W. L. Tedders

RTLA 564. Pecan weevil, Curculio caryae

Material: Five gross specimens (grubs)
Diagnosis: Infected with Beauveria fungus
Submitter: G. E. Cosgrove and W. L. Tedders

RTLA 565. Eel, Ilyophis brunneus

Material: One gross specimen with enlargement on cranium
Diagnosis: Normal muscle
Submitter: R. H. Kanazawa

RTLA 566. Rainbow trout, Salmo gairdneri

Material: Five microscope slides
Diagnosis: General toxicosis and a small hepatoma in the liver
Submitter: C. E. Smith

RTLA 567. Rainbow trout, Salmo gairdneri

Material: Four microscope slides
Diagnosis: General toxicosis
Submitter: C. E. Smith

RTLA 568. Rainbow trout, Salmo gairdneri

Material: Three microscope slides
Diagnosis: General toxicosis
Submitter: C. E. Smith

RTLA 569. Scallop, Aequipecten irradians

Material: Adductor muscles

Diagnosis: Granuloma in response to gram-positive bacteria

Submitter: E. J. Petrovits

RTLA 570. Oncorhynchus rhodurus f. macrostomus

Material: Six microscope slides

Diagnosis: Liver -- hepatoma; stomach -- adenomatous polyps of
gastric mucosa

Submitter: I. Kimura

RTLA 571. Oncorhynchus rhodurus f. macrostomus

Material: Six microscope slides

Diagnosis: Liver -- hepatoma; stomach -- adenomatous polyps of
gastric mucosa

Submitter: I. Kimura

RTLA 572. Oncorhynchus masou ishikawai

Material: One microscope slides; one piece of tissue

Diagnosis: Multiple well-differentiated hepatomas

Submitter: F. Takashima

Reprint: Takashima, Fumio and Takashi Hibiya. Hepatic Tumors in
Yamamé, Oncorhynchus masou ishikawai: A Preliminary
Report. Bull. Jap. Soc. Sci. Fish., 38(9): 955-964. 1972.

RTLA 573. Salvelinus miyabei x S. fontinalis

Material: Two microscope slides; one piece of tissue

Diagnosis: Subcutaneous fibrosarcoma; metastatic fibrosarcoma
of kidney

Submitter: F. Takashima

Reprint: Takashima, Fumio and Takashi Hibiya. Fibrosarcoma in
Pond-Cultured Hybrids of Salvelinus. Jap. J. Ichthyol.,
19(2): 97-102. 1972.

RTLA 574. Coho salmon, Oncorhynchus kisutch

Material: Two pieces of wet thyroid tissue

Diagnosis: Normal

Submitter: L. M. Ashley

RTLA 575. Channel catfish, Ictalurus punctatus

Material: Two microscope slides

Diagnosis: Viral inclusions

Submitter: C. E. Smith

RTLA 576A., B., C. Fungus, Emmonsia crescens

Material: Liver tissue from a monkey, pack rat, and guinea pig

Diagnosis: Experimental infection

Submitter: W. L. Jellison

RTLA 577. Leopard frog, Rana pipiens; Red-spotted newt, Cynops pyrrhogaster;

Marbled salamander, Ambystoma opacum larvae

Material: Collection contains meticulously kept data books, hundreds
of reprints, photographs, and paraffin blocks and approxi-
mately 12,000 microscope slides of naturally occurring,

experimentally induced and tissue culture material from the Lucké renal adenocarcinoma of Rana pipiens including some of Dr. Lucké's original slides. The collection also contains several hundred slides of tumors (principally papillomas) of the red-spotted newt, Cynops pyrrhogaster and microscope slides from Ambystoma opacum larvae used in experimental studies.

Submitter: W. R. Duryee
Reprint: [see RTLA 456]

RTLA 578. Planarian, Dugesia dorotocephala

Material: Six pieces of tissue; five black and white photographs; one film strip

Diagnosis: Anomalous regeneration; etiology unknown
Submitter: R. Kenk

RTLA 579. Earthworm, Lumbricus terrestris

Material: Seven vials of pieces of worm; two color transparencies

Diagnosis: Worms experimentally treated with the pesticide, Carbofuran
Submitter: A. P. Gilman

RTLA 580. Coho salmon, Oncorhynchus kisutch

Material: Four pieces of thyroid tissue

Diagnosis: Normal

Submitter: W. T. Yasutake

RTLA 581. Manure worm, Eisenia foetida

Material: One color transparency

Diagnosis: Worm experimentally treated with the pesticide, Carbofuran
Submitter: A. P. Gilman

RTLA 582. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Papilloma

Submitter: G. G. Combs

RTLA 583. Catfish, Ictalurus sp.

Material: One gross specimen

Diagnosis: Papilloma

Submitter: G. G. Combs

RTLA 584. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Nevus

Submitter: G. G. Combs

RTLA 585. Bluegill, Lepomis macrochirus

Material: One gross specimen with unusually shallow dorsal muscle and unusually short dorsal fin

Diagnosis: Developmental anomaly

Submitter: D. Gaines

RTLA 586. Bluegill, Lepomis macrochirus

Material: One gross specimen

Diagnosis: Granulomas associated with defect in skeletal muscle adjacent to anal fin

Submitter: D. Gaines

RTLA 587. Dinosaur, Allosaurus fragilis

Material: Petrified bones

Diagnosis: Various examples of callus formation, osteomyelitis and perhaps ankylosis

Submitter: J. H. Madsen, Jr. and M. A. Carey

RTLA 588. Boa constrictor, Boa constrictor

Material: One piece of tissue

Diagnosis: Fibroma versus fibrocarcinoma

Submitter: B. L. Burge

RTLA 589. Atlantic salmon, Salmo salar

Material: Five microscope slides

Diagnosis: Epidermal carcinoma

Submitter: R. J. Roberts

RTLA 590. Rainbow trout, Salmo gairdneri

Material: Three microscope slides

Diagnosis: Unusual cells in the liver and the spleen believed to be a protozoan parasite. (Reminiscent of Leishmania).

Submitter: R. J. Roberts

RTLA 591. Alpine newt, Triturus alpestris

Material: One microscope slide

Diagnosis: Neuroepithelioma

Submitter: J. Darquenne

Reprint: Darquenne, Jacques. Actions de substances cancérogènes sur le régénérat de la queue de Triturus alpestris. Laur. (Amphibiens, Salamandridés). C. R. Hebd. Séances Acad. Sci., Ser. D, Sci. Nat. (Paris), 273(16): 1460-1462. 1971.

RTLA 592. Rainbow trout, Salmo gairdneri

Material: One microscope slide

Diagnosis: Hepatoma

Submitter: C. E. Smith

RTLA 593. Shortnose batfish, Ogocephalus nasutus

Material: One microscope slide

Diagnosis: Lymphocystis -- the growth was 2-3 c. in diameter and was located on the caudal peduncle of the specimen

Submitter: C. E. Smith

RTLA 594. Cichlasoma festivum

Material: Three pieces of stomach tissue; one microscope slide

Diagnosis: Gastric leiomyoma

Submitter: R. Bootsma

RTLA 595A. & B. Coho salmon, Oncorhynchus kisutch

Material: 595A -- five emaciated, lethargic fingerlings

595B -- five normal fingerlings

Diagnosis: No histologic lesions

Submitter: J. G. Hnath

RTLA 596. Striped mojarra, Diapterus plumieri

Material: One gross tumor specimen; six microscope slides

Diagnosis: Lipoma -- this striped mojarra is reported as the thirteenth fish known with a lipoma

Submitter: F. J. Schwartz

Reprint: Schwartz, F. J. and René Márquez. A Lipoma in the Striped Mojarra, Diapterus plumieri (Pisces: Gerridae) from Mexico. J. Elisha Mitchell Sci. Soc., 87(3): 87-90. 1971.

RTLA 597. Bullhead, Ictalurus sp.

Material: One gross specimen

Diagnosis: Malignant melanoma

Submitter: E. L. King, Jr.

RTLA 598. Tilehorned prionus, Prionus imbricornis

Material: Four pieces of larvae

Diagnosis: Extensive fungal invasion

Submitter: G. E. Cosgrove and J. A. Payne

RTLA 599. Staghorn coral, Acropora formosa

Material: Three microscope slides

Diagnosis: Polyp; possibly in response to trematode parasite

Submitter: D. P. Cheney

Reprints: Wong, Alan and Thomas C. Cheng. Histochemical and Histopathological Studies on Corals, Porites spp., Parasitized by Trematode Metacercariae. Soc. Invertebr. Pathol. Newsletter, 2(2): 23-24. 1969.

Cheney, D. P., A. J. Loerzel, R. H. Randall, and M. R. Struck. A Coralline Tumor of Acropora formosa from Guam. Soc. Invertebr. Pathol. Newsletter, 2(6): 13. 1970.

Cheney, Daniel P. Coral Tumors. Guam Sci. Teachers Assoc. Newsletter, Vol. 6, No. 7. 6 March 1972.

RTLA 600. White perch, Morone americana

Material: One gross specimen with a large, soft, spongy swelling on the ventral side posterior to the gills and extending to the anal fin

Diagnosis: Biliary duct cyst

Submitter: D. Ritchie and B. B. Collette

RTLA 601. White perch, Morone americana

Material: One gross specimen with excessive mucus secretion

Diagnosis: Pending

Submitter: D. Ritchie and B. B. Collette

RTLA 602. Australian rock oyster, Crassostrea commercialis

Material: Four microscope slides

Diagnosis: Polypoid pericardial tumor of Leydig cell origin

Submitter: P. Dinamani

Reprint: Dinamani, P. and Peter H. Wolf. Multiple Tumors in the Pericardial Cavity of an Australian Rock Oyster, Crassostrea commercialis (Iredale and Roughley). Int. J. Cancer, 11: 293-299. 1973.

RTLA 603. Longnose gar, Lepisosteus osseus

Material: Eight microscope slides; one photograph

Diagnosis: Benign epithelioma on the pelvic fin

Submitter: J. D. Hendricks

RTLA 604. Staghorn coral, Acropora formosa

Material: One gross specimen

Diagnosis: Polyp; possibly in response to trematode parasite

Submitter: D. P. Cheney

Reprints: [see RTLA 599]

RTLA 605. Staghorn coral, Acropora formosa

Material: One gross specimen

Diagnosis: Polyp; possibly in response to trematode parasite

Submitter: D. P. Cheney

Reprints: [see RTLA 599]

RTLA 606. Staghorn coral, Acropora formosa

Material: One gross specimen

Diagnosis: Polyp; possibly in response to trematode parasite

Submitter: D. P. Cheney

Reprints: [see RTLA 599]

RTLA 607. Guppy, Poecilia reticulata

Material: One gross specimen

Diagnosis: Developmental defect composed of striated muscle and bone

Submitter: J. S. Laurie

RTLA 608. Weakfish, Cynoscion regalis

Material: Eight microscope slides; two photographs

Diagnosis: Early well-differentiated lipoma versus developmental anomaly

Submitter: J. D. Hendricks

Reprints: Tubiash, Haskell S. and Jerry D. Hendricks. A Possible Lipoma in the Weakfish, Cynoscion regalis (Bloch and Schneider). [in preparation].

RTLA 609. Hogchoker, Trinectes maculatus

Material: Six microscope slides

Diagnosis: Well-differentiated lipoma or anomalous deposit

Submitter: M. W. Newman

RTLA 610. Croaker

Material: Three consecutive caudal vertebrae

Diagnosis: Multiple exostosis of the neural and haemal spines

Submitter: M. Landolt

RTLA 611. Croaker

Material: Two consecutive caudal vertebrae

Diagnosis: Multiple exostosis of the neural and haemal spines

Submitter: M. Landolt

RTLA 612. Walleye, Stizostedion vitreum vitreum

Material: Part of the caudal fin with part of a tumor attached;
four microscope slides; fourteen photographs

Diagnosis: Cutaneous fibroma

Submitter: D. Woronecki

RTLA 613. White catfish, Ictalurus catus

Material: One piece of tissue; four microscope slides; two
photographs

Diagnosis: Reticulum cell sarcoma

Submitter: M. Landolt

RTLA 614. African clawed toad, Xenopus laevis

Material: One hind leg

Diagnosis: Chondrification associated with hemorrhage and repair

Submitter: G. E. Cosgrove

RTLA 615. Earthworm, Lumbricus terrestris

Material: Portions of two worms experimentally treated with 11
ug Carbofuran; one with an enlarged area

Diagnosis: Heavy nematode infection

Submitter: A. P. Gilman

RTLA 616. Earthworm, Lumbricus terrestris

Material: One whole and two portions of worms experimentally
treated with 5 ug of a Carbofuran metabolite, 3-
hydroxycarbofuran showing blister-like lesions

Diagnosis: Heavy nematode infection

Submitter: A. P. Gilman

RTLA 617. Earthworm, Lumbricus terrestris

Material: One gross specimen experimentally treated with 57 ug of a
Carbofuran metabolite, 3-hydroxycarbofuranphenol showing
blister-like lesions

Diagnosis: Heavy nematode infection

Submitter: A. P. Gilman

RTLA 618. Earthworm, Lumbricus terrestris

Material: One gross specimen experimentally treated with ug Bux
(a carbamate insecticide) showing collar-like protrusions

Diagnosis: Heavy nematode infection

Submitter: A. P. Gilman

RTLA 619. Earthworm, Lumbricus terrestris

Material: Whole and one portion of worm experimentally treated with
17 ug Lannate (a carbamate insecticide) showing numerous
blister-like lesions

Diagnosis: Heavy nematode infection

Submitter: A. P. Gilman

RTLA 620. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Melanoma
Submitter: J. A. Couch

RTLA 621. Yellow bullhead, Ictalurus natalis

Material: One gross specimen
Diagnosis: Melanoma
Submitter: J. A. Couch

RTLA 622. Rainbow trout, Salmo gairdneri

Material: Branchial arch with enlarged thyroid; two microscope slides
Diagnosis: Follicular adenocarcinoma of the thyroid
Submitter: E. Mateo and M. Landolt

RTLA 623A. & B. Northern pike, Esox lucius

Material: One gross specimen with two ulcerative lesions along the dorsal surface
Diagnosis: Probable lymphosarcoma -- tissue too autolyzed for confirmation
Submitter: E. R. Brown

RTLA 624. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen with multiple nodular growths
Diagnosis: Lymphocystis
Submitter: E. R. Brown

RTLA 625. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen with soft blister-like growths in the webbing of the caudal fin
Diagnosis: Lymphocystis
Submitter: E. R. Brown

RTLA 626. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen with a mid-lateral protrusion on the right side just posterior to the operculum
Diagnosis: Probable neurilemmoma -- tissue too autolyzed for confirmation
Submitter: E. R. Brown

RTLA 627. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen with soft blister-like growths in the webbing of all the fins
Diagnosis: Lymphocystis
Submitter: E. R. Brown

RTLA 628. Ghost shrimp, Callianassa affinis

Material: Three microscope slides
Diagnosis: Digestive gland and integument lesions associated with malnutrition
Submitter: A. C. Smith
Reprint: Smith, Albert C. and Tonald L. Taylor. Digestive Gland and Integument Lesions Associated with Malnutrition in a Ghost Shrimp, Callianassa affinis. J. Invertebr. Pathol., 12(1): 1-6. 1968.

RTLA 629. Rainbow trout, Salmo gairdneri

Material: Most of the upper jaw with part of a growth broadly attached to the outside surface; one photograph
Diagnosis: Fibroma
Submitter: P. H. Wolf

RTLA 630. Rainbow trout, Salmo gairdneri

Material: Fifteen microscope slides; one photograph
Diagnosis: Thymic lymphoma -- probably with leukemia
Submitter: C. E. Smith

RTLA 631. Australian snake-necked turtle, Chelodina longicollis

Material: Growth from the dorsal side of the proximal end of the neck
Diagnosis: Multiple granulomas with a bacterial etiology
Submitter: W. Frair

RTLA 632. Nile monitor lizard, Varanus niloticus

Material: Four microscope slides
Diagnosis: Pre-neoplastic nodule versus a minimal deviation hepatoma
Submitter: P. Zwart

RTLA 633. African sungazer lizard, Cordylus polyzonus

Material: Two microscope slides
Diagnosis: Adenoma of the thyroid
Submitter: P. Zwart

RTLA 634. Garter snake, Thamnophis sirtalis

Material: Two microscope slides
Diagnosis: Cholangioma
Submitter: P. Zwart

RTLA 635. Nile monitor lizard, Varanus niloticus

Material: Seven microscope slides
Diagnosis: Probable plasma cell tumor
Submitter: P. Zwart

RTLA 636. Thorny skate, Raja radiata

Material: One greatly enlarged testis
Diagnosis: Adenoma of seminiferous epithelium (tentative)
Submitter: M. Newman

RTLA 637. Tiger swallowtail, Papilio glaucus

Material: One gross specimen with a growth approximately .5 cm. in diameter on the abdomen
Diagnosis: Salivary reservoir cyst containing bacteria and fungi
Submitter: K. Wolf

RTLA 638. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen with multiple raised lesions
Diagnosis: Epidermal hyperplasia
Submitter: E. R. Brown

RTLA 639. White sucker, Catostomus commersoni

Material: One gross specimen
Diagnosis: Tissue unsuitable for diagnosis
Submitter: E. R. Brown

RTLA 640. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 641. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 642. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 643. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 644. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 645. White sucker, Catostomus commersoni

Material: One gross specimen

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 646. White sucker, Catostomus commersoni

Material: One gross specimen

Diagnosis: Cutaneous papilloma

Submitter: E. R. Brown

RTLA 647. Northern pike, Esox lucius

Material: One fish head

Diagnosis: Epidermal hyperplasia

Submitter: E. R. Brown

RTLA 648. Kahawai, Arripis trutta

Material: Portion of the right body wall containing one-half of
a growth

Diagnosis: Well-differentiated lipoma

Submitter: P. M. Hine

RTLA 649. Sheepshead, Archosargus probatocephalus

Material: A piece of body wall consisting of normal appearing tissue
with a growth attached to the outer surface

Diagnosis: Guanophoroma

Submitter: W. E. Ribelin

RTLA 650. Croaker

Material: One microscope slide

Diagnosis: Neuroblastoma; retinoneuroblastoma

Submitter: M. M. Sigel

RTLA 651. Green turtle, Chelonia mydas
Material: Six microscope slides
Diagnosis: Fibropapilloma
Submitter: R. M. Overstreet

RTLA 652. Lingcod, Ophiodon elongatus
Material: One piece of tissue
Diagnosis: Lymphocystis
Submitter: G. R. Bell

RTLA 653. Sockeye salmon, Oncorhynchus nerka
Material: An excised growth
Diagnosis: Papillary adenocarcinoma
Submitter: G. R. Bell

RTLA 654. Florida softshell (turtle), Trionyx ferox
Material: Three microscope slides
Diagnosis: Granulocytic neoplasm versus a reticulum cell sarcoma
Submitter: P. Zwart

RTLA 655. Goldfish, Carassius auratus
Material: The right half of the head and a transverse section
through the gill chamber
Diagnosis: Fibroma
Submitter: E. C. Bay

RTLA 656. Leopard frog, Rana pipiens
Material: Two microscope slides
Diagnosis: Epidermal papilloma
Submitter: B. J. Cohen

RTLA 657. Leopard frog, Rana pipiens
Material: Four microscope slides
Diagnosis: Squamous cell carcinoma
Submitter: B. J. Cohen

RTLA 658. Leopard frog, Rana pipiens
Material: Four microscope slides
Diagnosis: Squamous cell carcinoma; epidermal hyperplasia
Submitter: B. J. Cohen

RTLA 659. Leopard frog, Rana pipiens
Material: Two microscope slides
Diagnosis: Dermal gland adenocarcinoma
Submitter: B. J. Cohen

RTLA 660. Leopard frog, Rana pipiens
Material: Eight microscope slides
Diagnosis: Invasive squamous cell carcinoma
Submitter: B. J. Cohen

RTLA 661A. & B. Spotted-newt, Notophthalmus viridescens
Material: Six pathologic gross specimens; two normal gross specimens
Diagnosis: Adiaspiromycosis
Submitter: N. Cohen

RTLA 662. Spotted newt, Notophthalmus viridescens

Material: A hard lump biopsied from the tail

Diagnosis: Group of hypertrophic sub-epidermal glands
associated with parasitic worms

Submitter: N. Cohen

RTLA 663. Death adder, Acanthopis antarticus

Material: Fifteen microscope slides

Diagnosis: Reticulum cell sarcoma

Submitter: L. A. Griner

RTLA 664. Hognose snake, Heterodon platyrhinos

Material: Fifteen microscope slides

Diagnosis: Reticulum cell sarcoma

Submitter: R. L. Snyder

RTLA 665. Galaxias vulgaris

Material: Partially dissected specimen with multiple growths
in body wall; two microscope slides

Diagnosis: Multiple infectious granulomas

Submitter: P. M. Hine

RTLA 666. Great sculpin, Myoxocephalus polyacanthocephalus

Material: Four vials containing normal and pathologic samples
of skin from the dorsal region of the head and the
dorsolateral region below the second dorsal fin of
the same specimen

Diagnosis: Normal organ

Submitter: J. S. Laurie

RTLA 667. Flathead sole, Hippoglossoides elassodon

Material: Tail of a sole with a rod-shaped growth

Diagnosis: Epidermal papilloma

Submitter: J. S. Laurie

RTLA 668. Tidepool sculpin, Oligocottus maculosus

Material: Two gross specimens with multiple grape-like clusters
of growths on the dorsal region of the head

Diagnosis: Intradermal cystic lesions consistent with gas bubble disease

Submitter: J. S. Laurie

RTLA 669. Lake whitefish, Coregonus clupeaformis

Material: A piece of tissue from the posterior dorsal body
cavity with a finger-like protrusion

Diagnosis: Septate fungus with encysted spores

Submitter: C. R. Wilson

RTLA 670. Burbot, Lota lota

Material: A piece of body wall

Diagnosis: Inflammatory lesion in response to unidentified
parasite material

Submitter: G. R. Bell

- RTLA 671. Coho salmon, Oncorhynchus kisutch
Material: Part of the body wall containing a cyst-like growth
Diagnosis: Sarcoma
Submitter: G. R. Bell
- RTLA 672. Luderick, Girella tricuspidata
Material: Two slides
Diagnosis: Toxic necrosis of kidney tubules
Submitter: P. H. Wolf
- RTLA 673. Rainbow trout, Salmo gairdneri
Material: One piece of tissue; two slides; six photographs
Diagnosis: Nephroblastoma
Submitter: P. H. Odense
Reprint: Odense, P. H., V. H. Logan, and S. R. Baker. Spontaneous Nephroblastoma in a Rainbow Trout (Salmo gairdneri). J. Fish. Res. Board Can., 30: 549-551. 1973.
- RTLA 674. Green crab, Carcinus maenus
Material: One gross specimen
Diagnosis: Developmental anomaly containing loose connective tissue
Submitter: G. W. Bane and S. Shumway
- RTLA 675. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Ameloblastic odontoma
Submitter: G. W. Bane and S. Shumway
- RTLA 676. Goldfish, Carassius auratus
Material: One piece of viscera; 4 slides
Diagnosis: Granuloma
Submitter: P. M. Hine
- RTLA 677. Atlantic menhaden, Brevoortia tyrannus
Material: One piece of tissue
Diagnosis: Ganglioneuroblastoma
Submitter: J. A. Quick, Jr. and W. Kand rashoff
- RTLA 678. Striped mojarra, Dipterus plumieri
Material: One piece of tissue; two photographs
Diagnosis: Fibroma
Submitter: J. A. Quick, Jr. and W. Kand rashoff
- RTLA 679. Largemouth bass, Micropterus salmoides
Material: One piece of tissue
Diagnosis: Lipoma
Submitter: J. L. Gaines, Jr.
- RTLA 680. Bluegill, Lepomis macrochirus
Material: One piece of tissue
Diagnosis: Fibroma
Submitter: J. L. Gaines, Jr.

RTLA 681. Largemouth bass, Micropterus salmoides

Material: One piece of tissue

Diagnosis: Fibroma

Submitter: J. L. Gaines, Jr.

RTLA 682. Black bullhead, Ictalurus melas

Material: One gross specimen

Diagnosis: Cutaneous papilloma with extra chromatophores

Submitter: J. L. Gaines, Jr.

RTLA 683. Black bullhead, Ictalurus melas

Material: One gross specimen

Diagnosis: Cutaneous papilloma with extra chromatophores

Submitter: J. L. Gaines, Jr.

RTLA 684. Bluegill, Lepomis macrochirus

Material: One gross specimen with multiple chalky skin lesions

Diagnosis: Pending

Submitter: J. L. Gaines, Jr.

RTLA 685. Largemouth bass, Micropterus salmoides

Material: Anterior part of one gross specimen

Diagnosis: Multiple cutaneous fibromas and fibrosarcomas

Submitter: J. L. Gaines, Jr.

RTLA 686. Striped bass, Morone saxatilis

Material: Mandible with a growth

Diagnosis: Exostosis; possibly as a result of an old fracture

Submitter: J. L. Gaines, Jr.

RTLA 687. Brown trout, Salmo trutta

Material: One piece of tissue

Diagnosis: Chronic inflammation and scar formation

Submitter: J. G. Hnath

RTLA 688. Key brotula, Ogilbia cayorum

Material: One gross specimen

Diagnosis: Protozoan cysts

Submitter: N. Rothman Feinberg

RTLA 689. Northern pike, Esox lucius

Material: One head

Diagnosis: Fibroma

Submitter: E. R. Brown

RTLA 690. Walleye, Stizostedion vitreum vitreum

Material: One head

Diagnosis: Probable rhabdomyoma

Submitter: E. R. Brown

RTLA 691. Bluegill, Lepomis macrochirus

Material: Twelve gross specimens

Diagnosis: Tissue unsuitable for diagnosis

Submitter: E. R. Brown

RTLA 692. Bullhead, Ictalurus sp.

Material: Nine gross specimens

Diagnosis: Tissue unsuitable for diagnosis

Submitter: E. R. Brown

RTLA 693. Hornyhead chub, Nocomis biguttatus

Material: One gross specimen

Diagnosis: Hyperpigmentation in epidermis

Submitter: E. R. Brown

RTLA 694. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Probable neoplasm; tissue unsuitable for making a definitive diagnosis

Submitter: E. R. Brown

RTLA 695. Yellow bullhead, Ictalurus natalis

Material: One gross specimen; two pieces of a lesion removed from the specimen

Diagnosis: Pigmented epidermal papilloma

Submitter: J. C. Harshbarger and J. A. Couch

RTLA 696. Yellow bullhead, Ictalurus natalis

Material: One gross specimen; two pieces of a lesion removed from the specimen

Diagnosis: Pigmented epidermal papilloma

Submitter: J. C. Harshbarger and J. A. Couch

RTLA 697. Chinook salmon, Oncorhynchus tshawytscha

Material: One pathologic piece of spleen; one normal piece of spleen

Diagnosis: Hemangioendothelioma

Submitter: G. R. Bell

RTLA 698. Walleye, Stizostedion vitreum vitreum

Material: Wet tissue

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 699. Walleye, Stizostedion vitreum vitreum

Material: Wet tissue

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 700. Steelhead rainbow trout, Salmo gairdneri

Material: A portion of fish extending from the anterior end of the second dorsal fin to the anal opening

Diagnosis: Cystic well-differentiated nephroblastoma

Submitter: J. G. Hnath

RTLA 701. Chinook salmon, Oncorhynchus tshawytscha

Material: A growth located ventral to the kidney

Diagnosis: Cystic well-differentiated nephroblastoma

Submitter: J. G. Hnath

RTLA 702. Tiger salamander, Ambystoma tigrinum

Material: One microscope slide; one photograph

Diagnosis: Epidermoid cyst containing sloughed cells

Submitter: F. L. Rose

RTLA 703. Tiger salamander, Ambystoma tigrinum

Material: One microscope slides; one photograph

Diagnosis: Epidermoid cyst containing sloughed cells

Submitter: F. L. Rose

RTLA 704. Tiger salamander, Ambystoma tigrinum

Material: One microscope slide; one photograph

Diagnosis: Papilloma -- noninvasive

Submitter: F. L. Rose

RTLA 705. Tiger salamander, Ambystoma tigrinum

Material: One microscope slide; one photograph

Diagnosis: Probable fibroma

Submitter: F. L. Rose

RTLA 706. Tiger salamander, Ambystoma tigrinum

Material: Two microscope slides; one photograph

Diagnosis: Fibroma versus myxofibroma

Submitter: F. L. Rose

RTLA 707. Tiger salamander, Ambystoma tigrinum

Material: One microscope slide; one photograph

Diagnosis: Dermal melanoma

Submitter: F. L. Rose

RTLA 708. Tiger salamander, Ambystoma tigrinum

Material: Two microscope slides; four photographs

Diagnosis: Probable resolving hemorrhage with breakdown and phagocytosis of red blood cells, however, endothelioma cannot be ruled out

Submitter: F. L. Rose

RTLA 709. Walleye, Stizostedion vitreum vitreum

Material: Three sections of body wall bearing a growth

Diagnosis: Dermal fibroma with mottled foci of calcification

Submitter: J. G. Hnath

RTLA 710. Summer flounder, Paralichthys dentatus

Material: A section from a growth which was located near the tip of the lower jaw medially

Diagnosis: Probable lipoma; tissue inadequate for definitive diagnosis

Submitter: R. R. Stickney

RTLA 711. Rainbow trout, Salmo gairdneri

Material: Seven microscope slides

Diagnosis: Thymic hyperplasia including hyperplastic epidermal elements

Submitter: R. J. Roberts

RTLA 712. Guppy, Poecilia reticulata

Material: Two partially dissected fish; one microscope slide
Diagnosis: Massive infestation of surface viscera by Ophryoglena
(ciliated protozoan)
Submitter: G. E. Cosgrove

RTLA 713. Oyster, Crassostrea virginica

Material: One gross specimen without shell; 6 black and white photographs; 3 microscope slides
Diagnosis: Focal hyperplasia of vesicular connective tissue in the mantle
Submitter: C. J. Dawe

RTLA 714. Oyster, Crassostrea virginica

Material: One gross specimen without shell; 5 black and white photographs; 6 microscope slides
Diagnosis: Aberrant nodule of vesicular connective tissue; possibly a developmental anomaly
Submitter: C. J. Dawe

RTLA 715. Peruvian brook trout, (probably Salvelinus fontinalis)

Material: Stomach and contiguous small bowel -- portions of liver and spleen are attached to the gastric cardia and the small bowel respectively by mesenteries; 13 microscope slides; 4 color transparencies; 6 black and white photographs
Diagnosis: Adenocarcinoma of the stomach; intussusception of stomach and carcinoma into the small bowel
Submitter: M. Landolt and E. Mateo

RTLA 716. Box tortoise, Terrapene carolinensis

Material: Two microscope slides
Diagnosis: Kidney adenocarcinoma or adenosarcoma with metastases to the liver
Submitter: R. Ippen
Reprint: Ippen, R. Ein Beitrag Zu Den Spontantumoren Bei Reptilien. Verhandlungsbericht des XIV. Internationalen Symposiums über die Erkrankungen der Zootiere (Wrocław, 1972). pp. 409-418. Akademie-Verlag, Berlin, 1972.

RTLA 717. Greek land tortoise, Testudo hermannii

Material: Four microscope slides
Diagnosis: Lymphoblastic lymphosarcoma
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 718. Ornamental tortoise, Chrysemys picta

Material: One microscope slide
Diagnosis: Parathyroid adenoma
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 719. Malayan monitor, Varanus salvator

Material: Three microscope slides
Diagnosis: Lymphocytic or plasmacytic lymphoma
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 720. Teju, Tupinambis rufescens

Material: One microscope slide
Diagnosis: Heptaoma
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 721. Water moccasin, Agkistrodon piscivorus

Material: One microscope slide
Diagnosis: Fibroma molle
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 722. Indian striate adder, Natrix stolata

Material: One microscope slide
Diagnosis: Hemangioendothelioma
Submitter: R. Ippen
Reprint: [see RTLA 716]

RTLA 723. Atlantic salmon, Salmo salar

Material: One gross specimen
Diagnosis: Marked epithelial hyperplasia characterized by cellular atypia suggestive of carcinoma in situ
Submitter: M. Landolt and R. Dexter

RTLA 724. Planarian, Dugesia dorotocephala

Material: Five gross specimens
Diagnosis: Anomalous regeneration; etiology unknown
Submitter: E. J. Bienen

RTLA 725. Brown shrimp, Penaeus aztecus

Material: Twenty microscope slides
Diagnosis: Cutaneous papilloma surrounding loose connective tissue and coagulated protein (hemolymph?)
Submitter: D. V. Lightner
Reprint: Sparks, Albert K. and Donald V. Lightner. A Tumorlike Papilliform Growth in the Brown Shrimp (Penaeus aztecus). J. Invertebr. Pathol., 22(2): 203-212. 1973.

RTLA 726. Cutthroat trout (Lahonton strain), Salmo clarki

Material: Three microscope slides
Diagnosis: Advanced hepatoma
Submitter: C. E. Smith

RTLA 727. Anolis sp.

Material: One gross specimen with lesions on tail and left hindleg
Diagnosis: Bacterial granuloma
Submitter: H. A. Fehlmann

RTLA 728A. & B. Japanese beetle, Popillia japonica

Material: Two gross specimens

Diagnosis: Septate fungus

Submitter: D. A. Chittick

RTLA 729. Rhinoceros viper, Bitis nasicornis

Material: The head and two additional pieces of tissue

Diagnosis: Conjunctival inclusion cysts versus congenital infection

Submitter: J. E. Cooper

RTLA 730. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Pending

Submitter: E. R. Brown

RTLA 731. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 732. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis probably associated with dermal sarcoma

Submitter: E. R. Brown

RTLA 733. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Pending

Submitter: E. R. Brown

RTLA 734. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 735. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 736. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 737. Bass

Material: One gross specimen

Diagnosis: Scoliosis

Submitter: E. R. Brown

RTLA 738. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Probable neoplasm; preservation insufficient for conclusive determination

Submitter: E. R. Brown

RTLA 739. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 740. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 741. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Dermal sarcoma

Submitter: E. R. Brown

RTLA 742. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis associated with dermal sarcoma

Submitter: E. R. Brown

RTLA 743. Northern pike, Esox lucius

Material: One gross specimen

Diagnosis: Hematopoietic neoplasm

Submitter: E. R. Brown

RTLA 744. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 745. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Probable dermal sarcoma

Submitter: E. R. Brown

RTLA 746. Bass

Material: One gross specimen

Diagnosis: Multiple bacterial granulomas

Submitter: E. R. Brown

RTLA 747. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Lymphocystis

Submitter: E. R. Brown

RTLA 748. Northern pike, Esox lucius

Material: One piece of body wall

Diagnosis: Nephroblastoma

Submitter: E. R. Brown

RTLA 749. Walleye, Stizostedion vitreum vitreum

Material: One gross specimen

Diagnosis: Dermal sarcoma

Submitter: E. R. Brown

RTLA 750. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 751. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 752. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 753. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 754. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 755. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs

RTLA 756. American toad, Bufo americanus
Material: Four toads with lesions randomly scattered on the ventral surface of each animal
Diagnosis: Probably due to parasites
Submitter: G. Gentry

RTLA 757. Australian rock oyster, Crassostrea commercialis
Material: One microscope slide
Diagnosis: Haplosporidian and helminth parasites
Submitter: P. H. Wolf

RTLA 758. Australian rock oyster, Crassostrea commercialis
Material: One microscope slide
Diagnosis: Tylocephalum (?) sp.
Submitter: P. H. Wolf

RTLA 759A. & B. African walking catfish
Material: Two microscope slides; 2 black and white photographs
Diagnosis: Hemangioma (RTLA 759A); Dermal fibroma (RTLA 759B)
Submitter: I. Paperna

RTLA 760. Electric catfish, Malapterurus electricus
Material: Two microscope slides; 2 paraffin blocks; one black and white photograph
Diagnosis: Epithelioma -- on lips, head and flanks
Submitter: I. Paperna

RTLA 761. Cichlid, Haplochromis ismaeli

Material: One microscope slide; 2 black and white photographs

Diagnosis: Lipoma - subcutaneous

Submitter: I. Paperna

RTLA 762. Mummichog, Fundulus heteroclitus

Material: Two microscope slides; 2 black and white photographs

Diagnosis: fibro-epithelioma of the skin

Submitter: I. Paperna

RTLA 763. Ulua, Carangoides ajax (white ulua) or C. equula (ulua)

Material: Body serosa with worms

Diagnosis: Pleurocercoid larvae of a tapeworm

Submitter: A. C. Smith

RTLA 764. Black tip shark, Carcharhinus melanopterus

Material: Normal and mottled liver

Diagnosis: Fatty Liver

Submitter: A. C. Smith and R. L. Taylor

RTLA 765. Rainbow trout, Salmo gairdneri

Material: One gross specimen; 3 microscope slides

Diagnosis: Nephroblastoma

Submitter: D. Woronecki

RTLA 766. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Epidermal papilloma

Submitter: J. L. Gaines, Jr.

RTLA 767. Australian rock oyster, Crassostrea commercialis

Material: One microscope slide

Diagnosis: Hematopoietic neoplasm

Submitter: P. H. Wolf

RTLA 768. Australian rock oyster, Crassostrea commercialis

Material: Four microscope slides; 2 black and white photographs

Diagnosis: Infected with ciliate protozoans

Submitter: P. H. Wolf

RTLA 769. Jewfish, Sciena autarctica

Material: Four pieces of wet tissue

Diagnosis: Pending

Submitter: P. H. Wolf

RTLA 770. White hake, Urophycis tenuis

Material: Dorsal fin with adjacent growth

Diagnosis: Fibrosarcoma

Submitter: M. W. Newman

RTLA 771. Pacific oyster, Crassostrea gigas

Material: One gross specimen

Diagnosis: Pedunculated vesiculo-epithelial polyp of the mantle

Submitter: J. G. Denison

- RTLA 772. Rainbow trout, Salmo gairdneri
Material: A piece of a kidney tumor; 4 microscope slides
Diagnosis: Nephroblastoma
Submitter: C. E. Smith
- RTLA 773. Spring or chinook salmon, Oncorhynchus tshawytscha
Material: Three microscope slides
Diagnosis: Lymphoma
Submitter: G. R. Bell
- RTLA 774. Spot-tail shiner, Notropis hudsonius
Material: A growth found lying freely in the body cavity
Diagnosis: Vascularized tissue adjacent to or part of ovary containing sporozoan parasites
Submitter: D. J. Klemm
- RTLA 775. Sinai desert cobra, Walterinnesia aegyptia
Material: Two pieces of kidney tissue
Diagnosis: Non-caseating granuloma similar to sarcoidosis, but not showing Schaumann bodies
Submitter: E. Elkan
- RTLA 776. Croaker
Material: A grossly enlarged vertebral spine
Diagnosis: Exostosis
Submitter: K. Holland
- RTLA 777. Yellow perch, Perca flavescens
Material: A wedge of tissue removed from a large mass which was found free in the body cavity
Diagnosis: Fibroma
Submitter: A. Cook
- RTLA 778. Indigo snake, Drymarchon corais couperi
Material: Four microscope slides
Diagnosis: Narcotizing enteritis
Submitter: E. A. Holzinger
- RTLA 779. Largemouth bass, Micropterus salmoides
Material: One gross specimen
Diagnosis: Well-differentiated lipoma
Submitter: J. L. Gaines, Jr.
- RTLA 780. Largemouth bass, Micropterus salmoides
Material: Spleen
Diagnosis: Mesenteric lipoma adjacent to spleen
Submitter: J. L. Gaines, Jr.
- RTLA 781. Rainbow trout, Salmo gairdneri
Material: One microscope slide
Diagnosis: Granuloma
Submitter: B. L. Munday
- RTLA 782. Spot, Leiostomus xanthurus
Material: A piece of tissue with part of a growth
Diagnosis: Microsporida infection; Pleistophora sp.
Submitter: R. M. Overstreet

RTLA 783. Rainbow trout, Salmo gairdneri
Material: Three microscope slides
Diagnosis: Mycobacterial granuloma
Submitter: B. L. Munday

RTLA 784. Morelet's crocodile, Crocodylus moreletii
Material: One crocodile
Diagnosis: Anasarca associated with malnutrition
Submitter: R. H. Hunt

RTLA 785. Morelet's crocodile, Crocodylus moreletii
Material: One crocodile
Diagnosis: Anasarca associated with malnutrition
Submitter: R. H. Hunt

RTLA 786. Spectacled caiman, Caiman crocodilus
Material: One crocodile
Diagnosis: Normal (control)
Submitter: R. H. Hunt

RTLA 787. Black tetra, Gymnocorymbus ternetzi
Material: One fish
Diagnosis: Pending
Submitter: M. E. Rice and T. C. Smith

RTLA 788. Atlantic cod, Gadus morhua
Material: Ventro-posterior edge of the opercular area with a
sub-epidermal, firm, growth
Diagnosis: Fibroma
Submitter: J. S. Laurie

RTLA 789. Spring-tail lizard, Uromastyx acanthinurus
Material: Material excised from a large swelling on the left
hind foot
Diagnosis: Bacterial granuloma
Submitter: R. Crombie

RTLA 790. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Pending
Submitter: S. Shumway

RTLA 791. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one color transparency
Diagnosis: Dermal melanocytoma
Submitter: F. L. Rose

RTLA 792. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one color transparency
Diagnosis: Dermal myxofibroma
Submitter: F. L. Rose

RTLA 793. Bluegill, Lepomis microchirus
Material: One gross specimen
Diagnosis: Cutaneous melanoma
Submitter: J. M. Barkuloo

- RTLA 794. Sydney rock oyster, Crassostrea commercialis
Material: One microscope slide; 2 color transparencies
Diagnosis: Unabsorbed spermatic tubules (associated with sex reversal)
Submitter: P. H. Wolf
- RTLA 795. Brown trout, Salmo trutta
Material: One microscope slide
Diagnosis: Leiomyoma
Submitter: C. E. Smith
- RTLA 796. Largemouth bass, Micropterus salmoides
Material: One microscope slide
Diagnosis: Cystic mesothelioma
Submitter: C. E. Smith
- RTLA 797. Golden trout, Salmo aguabonita
Material: One microscope slide
Diagnosis: Fibroepithelioma of the skin
Submitter: C. E. Smith
- RTLA 798. Boa constrictor, Boa constrictor
Material: One gross specimen
Diagnosis: Fecal impaction
Submitter: I. Gorman
- RTLA 799. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen; 2 electron photomicrographs
Diagnosis: Dermal sarcoma
Submitter: W. E. Ribelin
- RTLA 800. Sauger, Stizostedion canadense
Material: One gross specimen
Diagnosis: Lipid granulomas within hyperplastic abdominal depot fat
Submitter: J. G. Hnath and D. Tomljanovich
- RTLA 801. Sauger, Stizostedion canadense
Material: One gross specimen
Diagnosis: Lipid granulomas within hyperplastic abdominal depot fat
Submitter: J. G. Hnath and D. Tomljanovich
- RTLA 802. Red-spotted newt, Notophthalmus viridescens
Material: One gross specimen
Diagnosis: Gram negative bacterial infection
Submitter: G. Gentry
- RTLA 803. Brown trout, Salmo trutta
Material: Liver and associated growth
Diagnosis: Nephroblastoma
Submitter: P. M. Hine
- RTLA 804. Nile monitor, Varanus niloticus
Material: One paraffin block
Diagnosis: Heterotopic bone formation ("Myositis ossificans")
Submitter: E. Elkan

RTLA 805. Sphaerodactylus a. argus

Material: One gross specimen
Diagnosis: Parasitic cyst
Submitter: R. Crombie

RTLA 806. Anolis garmani

Material: One gross specimen
Diagnosis: Bullet embedded under skin
Submitter: R. Crombie

RTLA 807. Striped mullet, Mugil cephalus

Material: Five microscope slides; 4 black and white photographs
Diagnosis: Fibroma with areas of ossification
Submitter: D. V. Lightner

RTLA 808. Muskellunge, Esox masquinongy

Material: Fifteen slides
Diagnosis: Lymphosarcoma
Submitter: R. Sonstegard

RTLA 809. Leopard frog, Rana pipiens

Material: Research material including 163 microscope slides, 111 paraffin blocks, 50 slidestrips, 21 Kodachrome transparencies, reprints of 8 papers and two log books demonstrating renal adenocarcinoma
Submitter: G. S. King
Reprints: King, Gladys S. Evidence of a Biochemical Lesion Stage in Advance of Frog Tumor Formation. Ann. N. Y. Acad. Sci., 126(1): 222-236. 1965.

King, Gladys S. Heterochromatic Cells During the Frog Tumor Process. Am. Zool., 9(4): 1125. 1969. (Abstr.).

RTLA 810. Bullsnake, Pituophis catenifer

Material: Four microscope slides
Diagnosis: Pigmented spindle-cell sarcoma; possibly of peripheral nerve origin
Submitter: G. Migaki

RTLA 811. Goeduck, Panope generosa

Material: One paraffin block containing a cyst on a siphon
Diagnosis: Abscess
Submitter: G. B. Pauley

RTLA 812. Chinook salmon, Oncorhynchus tshawytscha

Material: Two paraffin blocks containing gills with small white cysts
Diagnosis: Parasitized by Dermocystidium
Submitter: G. B. Pauley
Reprint: Pauley, Gilbert B. Prespawning Adult Salmon Mortality Associated with a Fungus of the Genus Dermocystidium. J. Fish. Res. Bd. Can., 24(4): 843-848. 1967.

RTLA 813. Rainbow trout, Salmo gairdneri

Material: Two paraffin blocks

Diagnosis: Hepatoma

Submitter: G. B. Pauley

RTLA 814. Shipworm, Teredo sp. (fossil specimen)

Material: A polished section of conifer wood containing the borings and pellets of Teredo and a petrified Teredo body

Diagnosis: No neoplastic involvement; the specimen will serve to demonstrate the possibility of finding a neoplasm in an invertebrate fossil

Submitter: J. A. Tuta

RTLA 815. Pacific oyster, Crassostrea gigas

Material: Four paraffin blocks

Diagnosis: Parasitized by Protista incertae sedis

Submitter: G. B. Pauley

Reprint: Becker, C. Dale and Gilbert B. Pauley. An Ovarian Parasite (Protista incertae sedis) from the Pacific Oyster, Crassostrea gigas. J. Invertebr. Pathol., 12: 425-437. 1968.

RTLA 816. Freshwater mussel, Gonidea angulata

Material: One paraffin block

Diagnosis: Parasitized by the trematode, Aspidogaster conchicola

Submitter: G. B. Pauley

Reprint: Pauley, Gilbert B. and C. Dale Becker. Aspidogaster conchicola in Mollusks of the Columbia River System with Comments on the Host's Pathological Response. J. Parasitol., 54(4): 917-920. 1968.

RTLA 817. Painted turtle, Chrysemys picta

Material: Two paraffin blocks

Diagnosis: Two ulcers in the stomach and one in the duodenum

Submitter: G. B. Pauley

Reprint: Pauley, Gilbert B. and Douglas L. Robberson. A Painted Turtle (Chrysemys picta) with Ulcers in the Stomach and Duodenum. Northwest Sci., 40(2): 79-82. 1966.

RTLA 818. Butter clam, Saxidomus giganteus

Material: Four paraffin blocks

Diagnosis: Abscesses

Submitter: G. B. Pauley

RTLA 819. Coho salmon, Oncorhynchus kisutch

Material: A wedge of tissue removed from a growth located on the dorsal side of the fish just caudal to the head; one color photograph

Diagnosis: Fibroma

Submitter: G. Hoskins

RTLA 820. Marbled salamander, Ambystoma opacum

Material: Encapsulated tumor about 1/2 cm sphere removed from the neck near the area of jaw proximal; 4 slides; 1 paraffin block; 6 photographs
Diagnosis: Non-invasive Leydig cell neoplasm
Submitter: C. T. Wilson

RTLA 821A. & B. Striped mullet, Mugil cephalus

Material: Four slides; 3 photographs
Diagnosis: Ossifying fibroma
Submitter: D. V. Lightner

RTLA 822. Rainbow trout, Salmo gairdneri

Material: One-half of a growth; 4 photographs; 4 negatives
Diagnosis: Pending
Submitter: P. M. Hine

RTLA 823. Sauger, Stizostedion canadense

Material: One gross specimen with a growth posterior to the left eye and a small, slightly raised lesion on the right lateral side; one color transparency
Diagnosis: Ossifying fibroma
Submitter: D. Tomljanovich

RTLA 824. English sole, Parophrys vetulus

Material: One gross specimen with a large growth posterior to the head between the lateral line and dorsal fin on the eyed-side
Diagnosis: Papilloma
Submitter: N. P. Boyce

RTLA 825. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal carcinoma
Submitter: J. C. Harshbarger and G. G. Combs

RTLA 826. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Epidermal hyperplasia overlying dermal fat deposit
Submitter: J. C. Harshbarger and G. G. Combs

RTLA 827. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Papilloma
Submitter: J. C. Harshbarger and G. G. Combs

RTLA 828. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen
Diagnosis: Inflammatory lesion with hyperpigmentation
Submitter: J. C. Harshbarger

RTLA 829. Florida gar, Lepisosteus platyrhincus

Material: One gross specimen
Diagnosis: Pending
Submitter: J. C. Harshbarger and G. G. Combs

RTLA 830. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 831. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Inflammatory lesion

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 832. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Papillary hyperplasia versus papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 833. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Papillary hyperplasia versus papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 834. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 835. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 836. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Subdermal or intradermal fat deposit

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 837. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Pigmented papillary hyperplasia

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 838. Brown bullhead, Ictalurus nebulosus

Material: One gross specimen

Diagnosis: Papilloma

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 839. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Nevus

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 840. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Pigmented papillary hyperplasia

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 841. Brown bullhead, Ictalurus nebulosus

Material: One fish head

Diagnosis: Enlarged taste papillae

Submitter: J. C. Harshbarger and G. G. Combs

RTLA 842. Turbot, Rhombus maximus

Material: One slide; 3 blocks

Diagnosis: Malignant lymphoma

Submitter: J. Nightingale

RTLA 843. Northern pike, Esox lucius

Material: Twenty slides

Diagnosis: Exuberant overgrowth of fibrous tissue in response
to a probable injury

Submitter: W. Lampert

RTLA 844-887. Oyster, Crassostrea virginica

Material: Forty-three slides

Diagnosis: Hematopoietic neoplasms

Submitter: E. M. Frierman

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American shad	241
American toad	756
Amphioxus	340
<u>Ampullarius australis</u>	269
<u>Anagasta kuehniella</u>	192
Angelfish	173, 515
<u>Anguilla vulgaris</u>	228, 457-459
<u>Anodonta californiensis</u>	38, 132, 141-145
<u>Anodonta oregonensis</u>	133, 140
<u>Anolis</u> sp.	727
<u>Anolis carolinensis</u>	55
<u>Anolis garmani</u>	806
<u>Anopheles annulipes</u>	285
<u>Aristogramma ramirezi</u>	166
<u>Aplysia</u> sp.	355, 357
<u>Aplysia californica</u>	168, 237
<u>Aplysia dactylomela</u>	344, 356, 358, 365, 368
Apple snail	269
<u>Archosargus probatocephalus</u>	331
<u>Arripis trutta</u>	648
<u>Astropecten</u> (?) sp.	345

RTLA NO.

Atlantic cod	788
Atlantic eel	228, 457-459
Atlantic menhaden	677
Atlantic needlefish	18
Atlantic octopus	19
Atlantic salmon	431, 589, 723
Australian rock oyster	602, 757, 758, 767
Australian skink	503
Australian snake-necked turtle	631
<u>Australorbis glabratus</u>	36

B

Bass	747, 746
<u>Bathygobius soporator</u>	400
Bilharzia snail	36
<u>Bimera</u> sp.	131
<u>Bitis nasicornis</u>	379, 508, 729
Black bullhead	682, 683
Black crappie	101
Black-lip pearl oyster	538
Black mollie	493
Black sea bass	364
Blacktail platy	230
Black tetra	787
Black tip shark	764
Bloater	99, 176, 273, 275
Blue crab	4, 243
Bluefish	467, 585, 586, 680, 684, 691, 793
Blue gourami	91
Blue mussel	235
Boa constrictor	116, 455A & B, 498, 588
<u>Boa constrictor</u>	116, 455A & B, 498, 588
<u>Bombyx mori</u>	85, 183, 190
Box turtle	113, 716
<u>Brachidontes recurvus</u>	329
<u>Branchiostoma caribaeum</u>	340
Bream	220
<u>Brevoortia tyrannus</u>	677
Broad-banded copperhead	226
Brook trout	216, 303, 518, 687, 795, 803
Brown bullhead	8, 9, 86, 281, 288, 289, 328, 384, 385, 388, 389, 391, 392-396, 398, 399, 472-475, 766, 825-828, 831-838, 840, 841
Brown shrimp	725
<u>Bufo americanus</u>	756

RTLA NO.

<u>Bufo arenarum</u>	510
<u>Bufo boreas</u>	206
<u>Bufo marinus</u>	200
<u>Bufo regularis</u>	418
Bull shark	212, 547
BullsnaKE	810
Burbot	670

C

Cabbage looper	181
<u>Caecilia tentaculata</u>	239, 263
Caecilian	239, 263
<u>Caiman crocodilus</u>	786
California king snake	478
California sea mussel	20
<u>Callianassa affinis</u>	628
<u>Callinectes sapidus</u>	4, 243
<u>Caloselasma rhodostoma</u>	246
<u>Carangoides ajax</u>	763
<u>Carangoides equula</u>	763
<u>Carassius auratus</u>	11, 88, 433, 434, 655, 676
<u>Carcharhinus leucas</u>	212, 547
<u>Carcharhinus melanopterus</u>	764
<u>Catostomus catostomus</u>	213
<u>Catostomus commersoni</u>	7, 24, 177, 639, 645, 646
<u>Catostomus macrocheilus</u>	118
<u>Centropristes striata</u>	364
<u>Ceramica picta</u>	182
Chain pickerel	10, 23, 402
<u>Chamaeleo dilepis</u>	462
Channel catfish	277, 575
<u>Chelodina longicollis</u>	631
<u>Chelonia mydas</u>	12, 121, 351, 651
<u>Chelydra serpentina</u>	74
Chinook salmon	248, 259, 423, 526, 697, 701, 773, 812
<u>Chlamys (Lyropecten) madisonius</u>	541
<u>Chlorohydra viridissima</u>	52
<u>Choristoneura fumiferana</u>	78
<u>Choristoneura murinana</u>	186
<u>Chrysemys picta</u>	34, 94, 718, 817
<u>Chrysemys scripta elegans</u>	201, 271
<u>Cichlasoma festivum</u>	594
<u>Cichlasoma meeki</u>	124
Cichlid	761
Claw-footed toad	31, 32, 109, 238
Clematis blister beetle	100
Clingfish	414
<u>Cnemidophorus lemniscatus</u>	130

RTLA NO.

Cobra	117, 556-561
Cockchafer	187
<u>Coenobita clypeatus</u>	483
Coho salmon	105, 197, 203, 258, 261, 268, 283, 284, 286, 430, 440, 450-454, 530, 533, 574, 595A & B, 580, 671, 819
<u>Colias lalia</u>	554
Colonial tunicate	346, 369, 371, 372
Common red-eared turtle	271
<u>Cordylus polyzonus</u>	633
<u>Coregonus clupeaformis</u>	669
<u>Coregonus hoyi</u>	99, 176, 257, 273
Corn earworm	180, 184
Corn snake	439, 465
Crane fly	191
<u>Crassostrea commercialis</u>	107, 151, 152, 160-162, 223, 602, 757, 758, 767, 794
<u>Crassostrea gigas</u>	37, 108, 134, 135, 153, 154, 215, 225, 771, 815
<u>Crassostrea virginica</u>	150, 171, 224, 502, 713, 714, 844-887
<u>Crenobia</u> sp.	119
<u>Crocodylus moreletii</u>	784, 785
<u>Crotalus atrox</u>	428, 429
<u>Crotalus horridus horridus</u>	275, 378, 486
<u>Cryptobranchus alleganiensis</u>	233
Cunner	550-553, 675, 790
<u>Curculio caryae</u>	563, 564
Cutthroat trout	267, 726
<u>Cynoscion regalis</u>	608
<u>Cyprinodon variegatus</u>	536
<u>Cyprinus carpio</u>	499

D

Dace	82
<u>Dactyligera muscula</u>	245
Dagger shrimp	17
Darkblotched rockfish	253
Death adder	663
<u>Deltistes</u> sp.	256
<u>Dendraster eccentricus</u>	341
<u>Dendroctonus ponderosae</u>	123
<u>Dermochelys coriacea</u>	63
<u>Diapterus plumieri</u>	596, 678
Dinosaur	587
<u>Diprion hercyniae</u>	27
Discus fish	178

RTLA NO.

<u>Doderleinia berycooides</u>	481
Douglas-fir tussock moth	438
Dover sole	264, 496, 497
<u>Draco</u> sp.	266
Dragonfly	227
<u>Dreissena polymorpha</u>	537
<u>Drosophila melanogaster</u>	3, 26, 49, 81, 198, 229, 249, 381-383, 443B
<u>Drymarchon corais couperi</u>	231, 778
<u>Dugesia</u> sp.	119
<u>Dugesia dorotocephala</u>	1, 30, 102, 159, 578, 724
Dwarf clawed frog	327, 419, 420
Dwarf gourami	554

E

<u>Eastern coral snake</u>	167
<u>Egernia napoleonsis</u>	503
<u>Eisenia foetida</u>	581
<u>Elaphe guttata guttata</u>	439, 465
<u>Elaphe obsoleta obsoleta</u>	125
<u>Elaphe obsoleta rossalenii</u>	507
<u>Elaphe vulpina</u>	96
Electric catfish	760
<u>Eleginops maclovinus</u>	476
Elephant trunk snake	532
Emerald lizard	482
<u>Emmonsia crescens</u>	576A, B, & C
<u>Enchytraeus</u> sp.	535
English sole	165, 425, 824
<u>Epicauta cinerea</u>	100
<u>Epinephelus morio</u>	362, 363, 366
<u>Eptatretus stouti</u>	295
<u>Esox lucius</u>	112, 127, 623A & B, 640, 644, 647, 689, 694, 733, 738, 743, 748, 843
<u>Esox masquinongy</u>	808
<u>Esox niger</u>	10, 23, 402
<u>Estigmene acrea</u>	185
European cockchafer	189
European corn borer	43
<u>Euthynnus pelamis</u>	122, 170
Everglade snake	507

F

Fiddler crab	349, 350
Firebellied newt	214, 513, 539, 540

RTLA NO.

Firemouth	124
Fir-shoot roller	186
Fish	260, 330, 555
Flathead sole	413, 415, 417, 426, 667
Florida gar	829
Florida pompano	500
Florida softshell turtle	654
Flying lizard	266
Fox snake	96
Frillfin goby	400
<u>Fundulus</u> sp.	512
<u>Fundulus heteroclitus</u>	204, 222, 762
Fungus	576A, B & C

G

<u>Gadus macrocephalus</u>	157
<u>Gadus morhua</u>	517, 788
<u>Galaxias vulgaris</u>	665
<u>Galleria mellonella</u>	28
Gaper clam	21
Garter snake	95, 634
<u>Gekko gecko</u>	424
<u>Genyonemus lineatus</u>	62, 404, 405, 495, 549
Ghost shrimp	628
Giant conch	110
Giant leathery turtle	63
Giant toad	200
<u>Girella tricuspidata</u>	672
<u>Gobio gobio</u>	219
Goby	342
Goeduck	811
Golden orfe	516
Golden trout	797
Goldfish	11, 88, 433, 434, 655, 676
<u>Gonidea angulata</u>	148, 149, 816
Granary weevil	46
Gray snapper	485
Great sculpin	666
Greater wax moth	28
Greek land tortoise	717
Green crab	674
Green turtle	12, 121, 651
Gudgeon	219
Guppy	66, 75, 199, 247, 276, 466, 607, 712, 787

H

Haddock	519
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RTLA NO.

<u>Half-toed gecko</u>	240
<u>Haplochromis ismaeli</u>	761
<u>Heliothis zea</u>	180, 184
Hellbender	233
<u>Hemerocampa pseudotsugata</u>	438
<u>Hemidactylus frenatus</u>	240
<u>Hermissenda crossicornis</u>	64
Hermit crab	352, 483
<u>Heterocentrotus mammillatus</u>	236
<u>Heterodon platyrhinos</u>	664
Hippocampus sp.	42
<u>Hippoglossoides elassodon</u>	413, 415, 417, 426, 427, 667
Hogchoker	609
Hognose snake	664
<u>Homo sapiens</u>	433A
Hooked mussel	329
Hornyhead chub	693
Horseshoe crab	336, 370
House fly	65, 90
<u>Hydrolagus colliei</u>	265, 417
<u>Hydrosaurus amboinensis</u>	291
<u>Hyla caerulea</u>	410
<u>Hymenochirus boettgeri</u>	327, 419, 420

I

<u>Ictalurus</u> sp.	129, 583, 597, 692, 750-755
<u>Ictalurus</u> <u>catus</u>	613
<u>Ictalurus</u> <u>melas</u>	682, 683
<u>Ictalurus</u> <u>natalis</u>	290, 386, 387, 390, 397, 406, 468-471, 582, 584, 620, 621, 695, 696, 830, 839
<u>Ictalurus</u> <u>punctatus</u>	277, 575
Ide	516
<u>Iguana iguana</u>	179, 234, 460
<u>Ilyophis brunneus</u>	565
Indian striate adder	722
Indigo snake	231, 778

J

Japanese beetle	728A & B
Jellyfish	360, 367
Jewfish	769

K

Kahawai	648
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RTLA NO.

Key brotula	688
Keyhole cichlid	511
Khapra beetle	45
Killifish	512
King crab	50

L

<u>Labeo bicolor</u>	98
<u>Lacerta viridis</u>	482
<u>Lagodon rhomboides</u>	343
Lake trout	514
Lake whitefish	669
<u>Lampetra lamottei</u>	84
<u>Lampropeltis getulus</u>	478
Larch sawfly	188, 196
Largemouth bass	14-16, 679, 681, 685, 779, 780, 796
Largescale sucker	118
Largeooth sawfish	546
Leafhopper	44
<u>Leiostomus xanthurus</u>	103, 422, 782
Leopard frog	41, 60, 172, 278, 279, 282, 408, 435, 456, 487-492, 577, 656-660, 809
Lightning bug	128
<u>Limulus polyphemus</u>	50, 336, 370
<u>Linckia multifora</u>	442
Lingcod	106, 254, 652
<u>Liophis</u> sp.	548
Littleneck clam	155
<u>Locusta migratoria</u>	68
Longhorn sculpin	445, 446
Longnose gar	603
Longnose sucker	213
<u>Lota lota</u>	670
Luderick	672
<u>Lumbricus</u> sp.	80, 104, 169, 250, 252, 262, 287
<u>Lumbricus terrestris</u>	2, 33, 158, 579, 615-619
<u>Lutjanus griseus</u>	485

M

<u>Macracanthorhynchus hirudinaceus</u>	293
Madeira cockroach	69
<u>Madrepora kauaiensis</u>	54
<u>Malapterurus electricus</u>	760

	<u>RTLA NO.</u>
Malayan monitor	461, 719
Manure worm	581
Marbled salamander	577, 820
<u>Margaritifera margaritifera</u>	137-139, 146
Mediterranean flour moth	192
<u>Melanogrammus aeglefinus</u>	519
<u>Meleontha</u> sp.	187, 189
<u>Mercenaria mercenaria</u>	421
<u>Merlangius merlangus</u>	521
<u>Metynnismaculatus</u>	57
Mexican axolotl	506
<u>Micropterus dolomieu</u>	156
<u>Microstomus pacificus</u>	264, 496, 497, 824
<u>Micropterus salmoides</u>	14-16, 679, 681, 685, 779, 780, 796
<u>Micrurus fulvius fulvius</u>	167
Moon snail	76
Morelet's crocodile	784, 785
<u>Morone americana</u>	600, 601
<u>Morone saxatilis</u>	6, 292, 686
Mosquito	285
Mountain pine beetle	123
Mud clam	5, 115
Mud puppy	97
<u>Mugil cephalus</u>	807, 812A & B
Mummichog	204, 222, 762
<u>Musca domestica</u>	65, 90
Muskellunge	808
<u>Mya arenaria</u>	5, 115, 147
<u>Myoxocephalus octodecemspinosis</u>	445, 446
<u>Myoxocephalus polyacanthocephalus</u>	666
<u>Mytilus californianus</u>	20
<u>Mytilus edulis</u>	235
 <u>N</u>	
<u>Naja naja</u>	117, 556-561
<u>Natrix stolata</u>	722
<u>Necturus maculosus</u>	97
Neotropical race runner	130
<u>Nereis (?)</u> sp.	632, 635, 804
Nile monitor lizard	693
<u>Nocomis biguttatus</u>	112, 127, 623A & B, 640, 644, 647, 689, 694, 733, 738, 743, 748, 843
Northern pike	484
<u>Nosema juli</u> n. sp.	67, 232, 272, 448, 501, 534, 661A & B, 662, 802
<u>Notophthalmus viridescens</u>	774
<u>Notropis hudsonius</u>	64
Nudibranch	

RTLA NO.

Nyctimystes daymanio
Nyctimystes kubori

412
 411

O

<u>Octopus vulgaris</u>	19
<u>Ogcocelphalus nasutus</u>	593
<u>Ogilbia cayorum</u>	688
<u>Oligocottus maculosus</u>	668
<u>Oncorhynchus kisutch</u>	105, 197, 203, 258, 261, 268, 283, 284, 286, 430, 440, 450-454, 530, 533, 574, 580, 595A & B, 671, 819
<u>Oncorhynchus masou ishikawae</u>	572
<u>Oncorhynchus nerka</u>	202, 242, 653
<u>Oncorhynchus rhodurus</u> f. <u>macrostomus</u>	570, 571
<u>Oncorhynchus tshawytscha</u>	248, 259, 423, 526, 697, 701, 773, 812
<u>Ophiodon elongatus</u>	106, 254, 652
<u>Orconectes rusticus</u>	79, 280
<u>Ornamental tortoise</u>	718
<u>Oryctes nasicornis</u>	194
<u>Oryctes rhinoceros</u>	193, 195
<u>Ostrinia nubilalis</u>	43

P

<u>Pacific cod</u>	157
<u>Pacific electric ray</u>	494
<u>Pacific hagfish</u>	295
<u>Pacific oyster</u>	37, 108, 153, 154, 215, 225, 771, 815
<u>Paddlefish</u>	463
<u>Pagurus</u> sp.	352
<u>Painted turtle</u>	34, 94, 817
<u>Palaemon</u> sp.	208
<u>Palaemonetes pugio</u>	17
<u>Panope americana</u>	542-545
<u>Panope generosa</u>	811
<u>Papilio glaucus</u>	637
<u>Paralichthys dentatus</u>	710
<u>Parophrys vetulus</u>	165, 425
<u>Patagonian shorefish</u>	476
<u>Pecan weevil</u>	563, 564
<u>Pen shell</u>	353
<u>Penaeus aztecus</u>	126, 209, 725
<u>Penaeus setiferus</u>	210
<u>Pencilfish</u>	432
<u>Perca flavescens</u>	777

RTLA NO.

<u>Peridroma saucia</u>	47, 48
<u>Periplaneta americana</u>	56
<u>Petromyzon marinus</u>	29, 89
<u>Photuris</u> sp.	128, 251
<u>Phyllomedusa trinitatis</u>	409
<u>Physa heterostropha</u>	35
Pilot black snake	125
<u>Pinctada margarifera</u>	538
Pinfish	343
<u>Pituophis catenifer</u>	810
<u>Placobdella parasitica</u>	437
Plaice	522, 528, 529
<u>Planaria dactyligera musculosa</u>	270, 477, 477A
Planarian	1, 30, 102, 119, 159, 245, 477, 477A, 578, 724
<u>Platichthys stellatus</u>	504, 505
<u>Pleuronectes platessa</u>	522, 528, 529
Poecilia sp.	493
<u>Poecilia reticulata</u>	66, 75, 199, 247, 276, 466, 607, 712
<u>Poecilobrycon harrisoni</u>	432
<u>Polinices lewisi</u>	76
<u>Polyodon spathula</u>	463
<u>Pomatomus saltatrix</u>	444
<u>Pomoxis nigromaculatus</u>	101
Pond snail	35
<u>Popillia japonica</u>	728A & B
Praying mantis	211, 274
<u>Prionus imbricornis</u>	531, 598
<u>Pristiphora erichsonii</u>	188, 196
<u>Pristis perotteti</u>	546
<u>Procambarus clarkii</u>	59, 562
<u>Python molurus</u>	441

Q

Quahog	421
Queenfish	53

R

Rainbow trout	25, 77, 217, 296-302, 304, 306-326, 464, 527, 566-568, 590, 592, 622, 629, 630, 673, 711, 765, 772, 781, 783, 813, 822
<u>Raja radiata</u>	636
Ramirez's dwarf cichlid	166

RTLA NO.

<u>Rana catesbeiana</u>	73, 205, 380
<u>Rana montezumae</u>	207
<u>Rana palustris</u> x <u>pipiens</u>	403
<u>Rana pipiens</u>	41, 60, 172, 278, 279, 282, 408, 435, 456, 487-492, 577, 656-660, 809
Ratfish	265, 416
Red-eared turtle	201
Red grouper	362, 363, 366
Red-spotted newt	67, 232, 272, 448, 501, 534, 577, 661A & B, 662, 802
Redtailed black shark	98
Rhinoceros beetle	193, 195
Rhinoceros viper	379, 508, 729
<u>Rhombus maximus</u>	842
River Jack	508
Roach	221
"Robalo"	476
Rock (stone?) crab	335
<u>Rutilus rutilus</u>	221

S

<u>Sail lizard</u>	291
<u>Salmo aguabonita</u>	797
<u>Salmo clarki</u>	267, 726
<u>Salmo gairdneri</u>	25, 77, 217, 296-302, 304, 306-326, 464, 527, 566-568, 590, 592, 622, 629, 630, 673, 700, 711, 765, 772, 781, 783, 813, 822
<u>Salmo salar</u>	431, 589, 723
<u>Salmo trutta</u>	518, 687, 795, 803
Saltmarsh caterpillar	185
<u>Salvelinus fontinalis</u>	216, 303, 715
<u>Salvelinus miyabei</u> x <u>S. fontinalis</u>	573
<u>Salvelinus namaycush</u>	514
Sandbar shark	523, 524
Sand dollar	341
Sauger	800, 801, 823
<u>Saxidomus giganteus</u>	92, 136, 818
Scallop	569
<u>Sceloporus occidentalis</u>	87
<u>Sciena antarctica</u>	769
<u>Scomberomorus maculatus</u>	373-375
Sea anemone	359
Sea hare	168, 237, 344, 355-358, 365, 368
Seahorse	42
Sea lamprey	29, 89

RTLA NO.

Sea morid	520
Sea squirt	337
Sea urchin test	83
<u>Sebastes crameri</u>	253
<u>Sebastes diploproa</u>	61
<u>Seriphus politus</u>	53
Sheepshead	331, 333, 334, 376, 377, 649
Sheepshead minnow	536
Shipworm	814
Shortnose batfish	593
<u>Sicyogaster maeandricus</u>	414
Silkworm	85, 183, 190
Silver dollar	57
Sinai desert cobra	775
<u>Sitophilus granarius</u>	46
Skipjack tuna	122, 170
Slatepencil urchin	236
Smallmouth bass	156
Smooth Washington clam	92, 136, 818
Snapping turtle	74
Sockeye salmon	202, 242, 653
Soft-shell clam	147
South American gartersnake	548
South American red-eared turtle	271
Spanish mackerel	373-375
Spectacled caiman	786
<u>Sphaerodactylus a. argus</u>	805
Spiny-headed worm	293
<u>Spisula solidissima</u>	294
Splitnose rockfish	61
Spot	103, 422, 782
Spot-tail shiner	774
Spotted eel	338
Spotted metynnus	57
Spring salmon	773
Spring-tail lizard	789
Spruce budworm	78
Spruce sawfly	27
Square-marked toad	418
Staghorn coral	436, 599, 604-606
Starry flounder	504, 505
Steelhead rainbow trout	700
<u>Stizostedion canadense</u>	800, 801, 823
<u>Stizostedion vitreum vitreum</u>	22, 93, 163, 164, 525, 612, 624-627, 638, 641-643, 690, 698, 699, 709, 730-732, 734-736, 739-742, 744, 745, 747, 749, 799
Striped bass	6, 292, 686
Striped mojarra	596, 678

RTLA NO.

<u>Striped mullet</u>	807, 821A & B
<u>Strombus gigas</u>	110
<u>Strongylura marina</u>	18
<u>Strophitus undulatus</u>	244
Sugar trout	332
Summer flounder	710
Surf clam	294
Sydney rock oyster	107, 151, 152, 160-162, 223, 794
<u>Sympodus discus</u>	178

T

<u>Tautogolabrus adspersus</u>	550-553, 675, 790
Teju	720
<u>Teredo</u> sp.	814
<u>Terrapene carolina</u>	113, 509, 716
<u>Testudo hermanni</u>	717
<u>Thamnophis sirtalis</u>	95, 634
Thorny skate	636
Tidepool sculpin	668
Tiger python	441
Tiger salamander	702-708, 791, 792
Tiger swallowtail	637
Tilehorned prionus	531, 598
Timber rattlesnake	275, 378, 486
<u>Tipula paludosa</u>	191
Tokay gecko	424
<u>Torpedo californica</u>	494
<u>Trachinotus carolinus</u>	500
<u>Tresus nuttalli</u>	21
<u>Trichogaster trichopterus</u>	91
<u>Trichoplusia ni</u>	181
<u>Trinectes maculatus</u>	609
Trinidad leaf frog	409
<u>Trionyx ferox</u>	654
<u>Triturus alpestris</u>	70, 591
<u>Trogoderma granarium</u>	45
<u>Tupinambis rufescens</u>	720
Turbot	842
Two-flapped chameleon	462

U

<u>Uca pugilator</u>	349, 350
Ulua	763
<u>Uromastyx acanthinurus</u>	789
<u>Uroptychis tenuis</u>	770

RTLA NO.V

<u>Varanus niloticus</u>	632, 635, 804
<u>Varanus salvator</u>	461, 719
Variegated cutworm	47, 48
<u>Venerupis staminea</u>	155
<u>Venus mercenaria</u>	421

W

Walleye	22, 93, 163, 164, 525, 612, 624-627, 638, 641-643, 690, 698, 699, 709, 730-732, 734-736, 739-742, 744, 745, 747, 749, 799
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<u>Walterinnesia aegyptia</u>	775
Warmouth	401
Water moccasin	721
Water snake	120
Weakfish	608
Western diamondback rattler	428, 429
Western fence lizard	87
Western toad	206
White catfish	613
White croaker	62, 404, 405, 495, 549
White hake	770
White perch	600, 601
White sucker	7, 24, 177, 639, 645, 646
White ulua	763
White's tree frog	410
Whiting	521

XYZ

<u>Xenochrophis piscator</u>	120
<u>Xenopus laevis</u>	31, 32, 109, 238, 614
<u>Xiphophorus maculatus</u> x <u>helleri</u>	230
Yellow bullhead	290, 386, 387, 390, 397, 406, 468-471, 582, 584, 620, 621, 695, 696, 830, 839
Yellow perch	777
Yellowfin goby	58, 479, 480
Zebra caterpillar	182

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SUBMIT WITH KNOWN INFORMATION TO:

Dr. John C. Harshbarger
Registry of Tumors in Lower Animals
National Museum of Natural History
Smithsonian Institution
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DATE RECD. _____
CONTRIBUTOR'S NO. _____
RTLA NO. _____
USNM NO. _____
NIH HISTOPATH NO. _____

COMMON NAME _____ FAMILY _____

PHYLUM _____ GENUS _____

CLASS _____ SPECIES _____

ORDER _____

CATEGORY: NEOPLASM INFLAMMATION INFECTION PARASITIC TOXIC
DEVELOPMENTAL DEFECT TRAUMATIC NORMAL OTHER

CONTRIBUTOR (NAME & ADDRESS): COLLECTOR (NAME & ADDRESS):

ITEMS SUBMITTED (QUANTITY):

GROSS MATERIAL _____ PHOTOGRAPHS _____

SLIDES _____ REPRINTS _____

BLOCKS _____ OTHER _____

ORIGIN OF ANIMAL: MARINE FRESHWATER ESTUARINE TERRESTRIAL

WHERE COLLECTED _____

DATE COLLECTED _____ SEX _____ AGE _____ STAGE OF LIFE CYCLE _____

HOW KILLED _____ FIXATION _____

GROSS DESCRIPTION _____

MICROSCOPE DX _____

COMMENTS (e.g., possible exposure to chemical pollutants or infectious agents,
incidence and duration of this condition in the population, etc.)

(Please use reverse side if more space is needed)



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